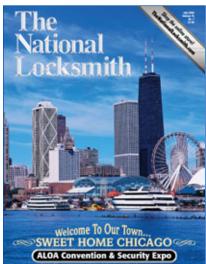
The Norse He online Store Stor

The National Locksmith

Welcome To Our Town... SWEET HOME CHICAGO (ALOA Convention & Security Expo

On The Cover...



As host of the 49th annual ALOA Convention, Rosemont, IL will be bustling with locksmiths taking educational classes and exploring manufacturers new product offerings. With any luck, some may also get in a Cubs or Sox game, hear some Chicago blues or stroll the Magnificent Mile.

Publisher
Editor
Art Director Jim Darow
Technical Editor
Senior Writers Sal Dulcamaro CML, Michael Hyde, Dale Libby CMS, Dave McOmie, Sara Probasco, Robert Sieveking
Contributing Writers John Blankenship, Tony Blass, Ron & Chris Curry, Mark Daniel, Richard Allen Dickey, Ken Holmlund, Tom Lynch, Tom Mazzone, Randy Mize, Bill Phillips, Tom Seroogy, Steve Young
Director of Sales & Marketing
Jeff Adair
Advertising Account Manager Debbie Schertzing
Accounting Manager
Sheila Campo
Production Assistants
Dave Krofel, Joseph Bonus
Administrative Assistants LaVerne Schertzing, Chandra Smith
Shipping Manager
Allan Galvez

National Publishing Company The National Locksmith ® ISSN #0364-3719 is published monthly by the National Publishing Co., 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861. Periodicals postage paid at Bartlet, Illinois 60107 and Additional mailing offices USPS 040110. Subscriptions \$46.00 per year in the USA: \$58.00 per year in Canada; \$72.00 in all other countries. Single copies \$700 each. Postmaster, please send change of address to National Publishing Co., 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861. ©2005 by the National Publishing Company. All rights reserved. Printed in the U.S.A.



(630) 837-2044 • Fax: (630) 837-1210 E-Mail: natllock@aol.com See us on the World-Wide Web: www.TheNationalLocksmith.com



- 74 **Beginner's Corner**
- 166 Test Drive

RESTORE KEY CONTROL A-Q AND MAINTAIN YOUR CURRENT KEY SYSTEM EVEN IN THE BEST INSTITUTIONS.

DORMITORY KEY CONTROL RESTORED.

Cho/Ce Plus IC Cores easily integrate into any existing key system using A–Q keyways. Conveniently restore key control over time or all at once using the same bitting.

ADMINISTRATION BUILDING SECURITY UPGRADED. Cho/Ce Plus Keys operate A-Q keyways in an existing system – but original keys will not operate Cho/Ce Plus A-Q key control IC cores. STUDENT UNION MAINTAINS KEY SYSTEM. Cho/Ce Plus IC Cores pin the same as existing A–Q IC cores providing convenient and effective key control restoration within any facility.

RROW

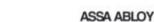
There's only one patented interchangeable core that integrates with existing key systems having A through Q keyways, upgrades security and affords authorized key control – The Choice Plus interchangeable core system. Choice Plus offers convenience and security, making even the best key system better!

Choice Plus is available in 6 and 7 pin cores, standard or drill resistant. Choose from a variety of keyways – Competitive keyways A-Q, Arrow 1C and 1D, or consult Arrow for restricted keyways. Convenience, security and key control – There's only one choice!

Choice Plus Interchangeable Cores and other Arrow products are available through your Authorized Arrow Service Center. Contact Arrow Lock for the one nearest you.



325 Duffy Avenue, Hicksville, New York 11801 Phone 516.704.2700 • Fax 877.228.6480 www.arrowlock.com Aim higher





Greg's Handle The Saga Begins...

OMMENTARY

If you have not been a regular reader of *The National Locksmith* since November of 2000, then you will not remember the saga of Greg's Hole. This was the story of a simple hole which needed to be angle bored through the foundation wall of our building in order to bury our phone line. The phone line needed to be



Greg sits in his hole at Christmas.

buried because it had been cut as part of a burglary attempt that year.

Sort of embarrassing that a locksmith magazine gets burglarized. But hey, Editor Greg Mango is a whiz with a drill, having been a real live safe man in his misspent youth. So

Greg offered, as you will recall from our earlier coverage, to drill that simple hole in the wall, which would allow the phone company to fill in a large hole THEY had dug outside the building.

Week after week, I would ask Greg if he brought in the drill. Week after week, he

would tell me he needed a special bit. Week after week turned into month after month, and before long I could feel the pain of all your spouses who are still waiting for you to fix something in your own home...like you do every day for your customers.

That is why I shuddered when Art Director Jim Darow came to me



Finally ready.



Greg's cracked handle. Mare Goedburg

Ite...IIKe you do every day for r customers.

Have questions? Want free technical help? Free Locksmith Forums!

and reported a broken safe handle on our media safe. This is an important safe to us. We store computer archives of all our magazines on it...including such treasured photos as the original pictures of Greg's Hole...see photos this page. We cannot risk a problem with this safe.

But who do we call when in a jam with a safe? Greg? We're five years older now. Do we still have the stamina for months of nagging? Who do you call? Safebusters?! That's Dale Libby's company. Dale could help us out. But hmmm, Dale might want payment...as in actual money. And if he doesn't, he'll at least hold this over my head for years to come...much like he did when he freed my small child from our locked vehicle. (It wasn't MY fault Dale came out at 6 a.m. wearing fuzzy slippers!)

Right now I can't tell you how soon Greg's Handle will be fixed. When he said he would fix it for me I reminded him about the hole. Five minutes later he was at my door to tell me that he had ordered the part.

Will that part sit on his desk for months just like that drill bit did? Will Dale Libby have to rescue me and fix Greg's Handle? Will Dale show up in fuzzy, pink slippers demanding Locksmith Wampum in trade for his assistance? Will I still be writing about Greg's Handle until the December issue in order to use the headline "Ho Ho Handle"?

For answers to these and other questions, stay tuned to *The National Locksmith*.

Marc Goldberg Publisher



Locksmith Fraud & Deception—Expands

hen I first wrote about the company "Chicago Locks Smiths 24 Hour" (May, 2005) fraudulently posing as a locksmith business illegally using existing business addresses in Yellow Pages listings under various company names in Illinois, no one knew at the time just how far reaching this practice had extended. Initially it was a dozen locations that were all traced back to the parent company "Priceline Locksmith Inc.," in the Bronx, NY. After further investigation, it has been learned that this practice extends into the thousands throughout the country, primarily concentrated in the major metropolitan areas. And, even more than just illegal address listings has been uncovered.

It appears that the practice of illegal address listing, service bait & switching, intimidation, on-line information and 411 information monopolization, counterfeit and stolen locksmith license numbers, and even malpractice by a major telephone provider are all under investigation. These are allegations that the state of Illinois is taking very seriously, causing the *Chicago Department of Consumer Services* to file fraud charges against *Priceline Locksmith Inc.* As a result of recent findings, this case may eventually reach the Federal level.

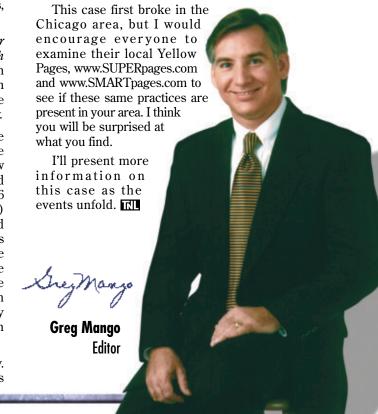
Oak Lawn, IL locksmith Mike Bronzell, owner of *All Hour Lock & Key* and vice president of *Illinois Indiana Locksmith Association*, has been a tremendous source of information regarding this story. Conveying that his business has been dramatically affected by the practices of this organization, he has been actively involved with almost every facet if this story.

In recent investigations it was reported that some of these companies in question are using counterfeit locksmith license numbers and stolen locksmith license numbers in Yellow Pages ads and on vehicles. One Villa Park, IL locksmith found that his locksmith license number was illegally used in 76 SBC on-line Yellow Pages listings (www.SMARTpages.com) that weren't his. Between SBC on-line SMARTpages.com and Verizon SUPERpages.com, thousands of fraudulent address listings blanketing several major metropolitan areas have been discovered, dominating the top tier of locksmith service listings, making it almost impossible for the legitimate single listed locksmith business to get referred. Current information indicates that all these fraudulent listings were placed by *Priceline Locksmith Inc.* and a second company involved in the same practices, *USA Locksmith* from New Jersey.

This is where the 411 monopolization comes into play. With fewer and fewer people using the printed Yellow Pages for information and more and more people using on-line (web based) Yellow Pages and 411 for information, it is almost guaranteed that they will get either a Priceline or USA locksmith affiliated company listed under any number of names and addresses. One investigator on this case called 411 for a locksmith referral from several different cell phone services and was given a Priceline number every time.

The web of scam activity by these companies has become so big and twisted, that we still don't know the true scope of it. We do know, however, that it doesn't stop here. We have learned that these same companies are applying the identical MO practices in the carpet cleaning business, florist services and possibly more.

Since the initial exposure of this case we now know what a profound impact these illegitimate companies have had on several locksmith businesses. In some instances it's been quite dramatic. In recent years lockout service has virtually dried up for some or reduced to a trickle for others. All the while no one really knew why...now we do.





IT'S YOUR TRANSPORTATION, OFFICE, AND LUNCHROOM. YOUR INSURANCE COMPANY SHOULD BE JUST AS VERSATILE.

Get commercial vehicle protection from Allstate.

We know just how important your vehicle is to your business and the many roles it plays. That's why your local Allstate agent offers a wide range of insurance products for your small business, including commercial auto insurance. All designed to help keep your business rolling along. Are you in Good Hands*?



Circle 207 on Rapid Reply

HERE

Shots Fired at Locksmith

This is a letter to caution all locksmiths that do lockouts. On the evening of April 12 my brother Ron Riedesel was called by the local sheriffs department to assist them with television repossession. They needed him to unlock the door of an apartment to serve the warrant and repossess the TV. As he proceeded to unlock the door he turned to his left to grab a screwdriver and heard a gunshot. The deputy behind him pushed him down to the ground and then returned fire through the closed door. My brother then proceeded to crawl down the steps and out the front door. After getting out the front door he ran to a tree nearby and called 911. After the call a bystander told my brother that he was bleeding. He had been shot with a deer slug. His wounds consisted of three holes in his upper arm and three holes in his back, about one inch from his spine. If he hadn't turned when he did it would have been a disaster. It has been over a year since the shooting and he is still in pain.

The following story was printed in the Sioux City Journal about the event:

Woodbury county sheriff's deputies fired on a man late Monday at a Sioux City residence after he allegedly shot a locksmith accompanying the deputies.

The deputies were serving civil papers and entering the upstairs apartment of 1326 Jennings St. when they were fired upon shortly after 9 PM, said Lt. Mick Lefler of the Sioux City Police Department.

The deputies returned fire, hitting the alleged gunman.





"We heard a lot of arguing before that," said Michaela Robinson, a neighbor. "Then we heard three or four gunshots.

Sioux City police and emergency personnel from Siouxland Paramedics immediately responded. Initially the call went out as an officer down.

Upon arrival at the scene, paramedics found the locksmith sitting outside the duplex where police officers had already bandaged his shoulder area. He was alert, talking and smiling at times.

The alleged gunman was handcuffed and brought out of the duplex on a stretcher. He, too, was alert.

Both parties were transported to a Sioux City hospital. Lefler said their injuries did not appear to be life threatening. At a brief press conference held about an hour after the incident, Lefler declined to release more details. Authorities on the scene were waiting for a search warrant to seize evidence in the residence.

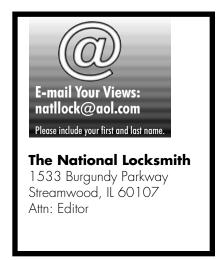
Personnel with the Iowa Division of Criminal Investigation were also on the scene.

Sheriff's deputies serve papers throughout the county regarding legal and civil matters, including arrest warrants, subpoenas and eviction notices.

To all of you out there unlocking doors, just remember that if you don't know who or what's on the other side, ask some questions. If you are still unsure or things just don't feel right, don't do it. The money made from a lockout just isn't enough to cover the cost of getting seriously hurt or even killed.

> John Riedesel Iowa

TNL



Chance More Free More!

Receive a VISA Gift Card worth anywhere from \$50.00 to \$500.00! To be eligible, simply purchase and install the MS® Maglock before August 31, 2005. It's that simple. Just visit our Web site, www.adamsrite.com/visa1 for easy terms and conditions of this special offer.

In addition to the cash, you and your customers will really appreciate the advantages of the MS Maglock. It's one of the smallest, lightest yet strongest maglocks on the market, and our customers are raving about it.

"We currently have Locknetics products in inventory. Once it is gone we will be purchasing the Adams Rite MS1500 Maglock as our standard inventory."

Bob B., Hardware Buyer

"Its strength and small size means it will fit most of my applications. Love the installation templates, and thanks for sending my VISA card so promptly."

Jeff H., Installer

"We are very impressed with this lock and the hospital is too. We will be using these locks much more in the future."

Rich R., Security Company President





AUTOMOTIVE PRODUCTS & TOOLS

Aable Locksmiths U1 Kit

The U1 KIT from Aable Locksmith will remove all Ford Focus locks without a sidebar, all flush mount Ford ignitions, and all Chrysler 8 cut ignitions. The kit contains four sets of instructions, force tool, drill blocks. picks, three sets of arbors and drill guides, turn wrench tool, so that sidebar locks can be assembled and update kit for Chrysler. A few of the cars that can be serviced by this kit are the Mercury Mountaineer, Ford Thunderbird, Lincoln Mark VIII, Lincoln LS, Ford Escape and Mazda Tribute.



According to the manufacturer, the U1 Adapter kit can pick virtually all Chrysler, Dodge, Jeep and 8 cut ignitions, in less than 5 minutes with no damage to lock.

Adrian Van Interiors

Adrian Steel Company has van interiors specifically designed for the security industry. Adrian's trade specific packages are designed to make the most of the work and storage space within your full size or mini van. Each trade package comes complete with ample shelving, cabinets, and a partition.



BigEasy Lock Out Kit for Locksmith Professionals

Over the last 6-years Steck Manufacturing's BigEasy Lockout Tool is one tool that is quickly becoming the tool of choice for locksmiths. As a result, Steck Manufacturing has released a new BigEasy kit to the



locksmith. It is simple to use by first inserting the Easy Wedge into the top of the door to allow enough room to insert the BigEasy tool into the door opening to reach the door lock from inside the window rather than using the door panel.

The BigEasy opens doors from inside the window and reduces liability issues with traditional lockout tools, which have the potential to disable wiring systems inside the door panel.

Each kit #32911 consists of the blue BigEasy tool with a glow in the dark tip, non-marring wedge, lock knob lifter and the popular inflatable Easy Wedge. Kits are available at most supply dealers.

Chrysler Door Locks

Lockcraft has two new door locks for Chrysler products. The first, Part DL80063, fits most 1995



through 2005 models of Concorde, LeBaron, New Yorker, Caravan, Dakota, Durango, Intrepid, Neon, Ram Charger, Spirit and Voyager. The second, Part DL80073, fits most 1998 through 2005 models of 300, Concorde, LHS, New Yorker, Town & Country, Caravan, Intrepid, Neon, Stratus, Vision and Voyager. Lockcraft ships product from its distribution center in Brownsville, Texas.

Strattec

Locksmiths attending the 2005 ALOA Convention and Security Expo July 22-24 in Rosemont, Ill., will get a first-hand look at how Strattec's CODE-SEEKER[™] programming tool helps them capitalize on significant opportunity and generate substantial profits in the automotive industry.

Strattec's booth, No. 723, will showcase an actual 2005 Jeep® Wrangler. Visitors to the booth will have the opportunity to program the jeep's key using CODE-SEEKER. In addition, the booth will feature two CODE-SEEKER simulators. Both the JEEP and simulators allow locksmiths to get a sense for CODE-SEEKER's ease of use and adaptability on



the job. Locksmiths can also try out Sttattec's QUICK-CODETM transponder cloning tool.

What's more, those who purchase a CODE-SEEKER at the show will receive \$400 worth of automotive keys and a premium gift. Current CODE-SEEKER owners who visit the booth will also receive a free gift at the show.

DOOR HARDWARE

Adams Rite Non-Handed Deadlatch

The non-handed 4900 Series Deadlatch from Adams Rite gives maximum flexibility for locksmiths and suppliers alike. With the 4900 Series, there is only one deadlatch to order, stock or install. The full 5/8" solid brass latchbolt on the 4900 can be reversed in the field, using only a screwdriver. Mounting plate bevel can be changed for flat, left or right hand beveled doors. Both flat and radius faceplates are supplied, to cover wood, hollow steel and aluminum stile doors. Faceplates are available in Clear. Dark Bronze or Black anodized finishes.

The tube spacers can be adjusted through the front with a hex key. For tab mounting, the tube spacer bracket is screw fastened, so it can be easily removed and cleaned.



The all-metal construction of the 4900 Series includes a onepiece cast latch holdback and stainless steel auxiliary dead latch pin. Easy-glide rollers ensure smooth action of the latchbolt and latchpin. It can be operated using any standard mortise cylinder with MS cam, backsets of 1-1/8" and 1-1/2' available. The 4900 Series retrofits to any existing MS(Deadbolt or 4500-4700 Deadlatch preparations. It is also compatible with all Adams Rite paddles, handles, latch pulls and entry trim.

ARROW HE Series

ARROW brings strength, durability and elegance to the residential security market with the introduction of the HE-Series designer entrance handle set. The sleek lockset is constructed from solid forged brass, features a lifetime mechanical and finish warranty, and includes the Arrow E Series security deadbolt with a one-inch



throw. The single cylinder lockset features a 2-3/8" backset, nonhanded design in US3 polished brass or 26D finish. The HE Series is easy to install and fits doors 1-3/8" to 1-3/4" thick.

ASSA CLIQ Technology

ASSA is introducing electromechanical lock cylinders that use what they call "CLIQ" technology. Electronic access control with time restricted access and audit capability will be possible with the mere switching out of the lock cylinder itself. There will be no need to replace the existing (strictly mechanical) door hardware with new electronically enhanced door hardware, because the electronics will be completely contained within the keys and lock cylinder plugs.



Door preps do not need to be modified to accommodate the additional mounting holes generally required by electronically enhanced locksets and there is no need to patch or cover holes in doors where electronic locks are removed and then re-drill the new doors that will take those locks. Locks can be converted as quickly as switching out regular mechanical lock cylinders. CLIQ is built off of the platform of the ASSA Twin mechanical lock and key system and adds electronic components to increase both the capabilities and security of the lock cylinders. Because the lock cylinder and key are still mostly mechanical. CLIQ electronics and standard mechanical Twin Pro cylinders can be integrated within a single master key system.

D&D Technologies Fully Adjustable Hinge

D & D'S heavy-duty Multi-Adjust hinge has been extremely



popular, so customers asked for a smaller version to accommodate lighter weight gates. The new Tru-Close® Mini-Multi Adjust hinge line is extremely flexible for both new and retrofit installations, as models allow for up to a 2" gap. Like other D&D Technologies' gate hardware products, the hinges are injection-molded glass fiber reinforced polymer, so they won't rust or stain.

The Mini-Multi Adjust is a versatile hinge that fits vinyl, ornamental iron, and aluminum or wood gates. The L-shaped mounting brackets provide 2faced fixing strength and ease of installation for vinyl gates. There is also a Mini-Multi Round hinge, designed for chain link.

Some models of the new hinge feature a longer leaf that can fit gate gaps of up to 2", and allow for horizontal slot adjustment of up to 1-1/2: and vertical adjustment of up to 3/4". The Mini-Multi Adjust hinge is designed to fit lighter gates up to 55 lb., while the original Tru-Close® Multi-Adjust can accommodate larger gates up to 132 lb.

HOPPE

The HOPPE HLS9000 Multipoint Locking Door System offers added security, tighter weather seals, smoother operation and protection against warp age and twisting in fine wooden patio and entry doors. It is available in eleven different and unique versions. Stainless steel has excellent corrosion resistance in natural atmospheric conditions that prevents pitting and staining. The HLS9000 line features a stainless steel deadbolt that is stronger than traditional deadbolts, a misshandling devise that prevents accidental locking point engagement as well as full size screw supports that helps control possible bending of the gear.



Kaba's Simplex 1000 Series Anti Spy Shield

Simplex mechanical pushbutton locks are a perfect choice for controlling access between public and private areas. The Simplex 1000 Series design comes standard with a recessed button area to inhibit outsiders from viewing authorized code entry. For areas that are particularly susceptible to unauthorized surveillance, a new Anti-Spy Shield (part number 201600-19-41) is now available.



Continued on page 14



Circle 277 on Rapid Reply

Continued from page 12

The new Anti-Spy Shield provides additional user privacy without obstructing the lock's use and easy one-handed operation. The shield is easy to install without additional door preparation. Its slim-line, black design blends in with any existing hardware and dÈcor. The shield also provides an additional benefit against severe weather environments (moisture and ice formation) for outside applications.

Kwikset® Keyless Home Access System

The Kwikset® Keyless Home Access System, the Powerbolt® 1000 touchpad electronic deadbolt is the latest in ultra-modern home security, simplifying and improving the home security routine for convenient, quick and carefree entry while making lost house keys a thing of the past.

• No wiring necessary; runs on 4 "AA" alkaline batteries.

• Low battery indicator light signals when replacement batteries are needed.

• Retains memory of programmed security codes during power outages.

• Easy to program, with up to over 390,000 security code combinations that can be programmed with a four- to eightdigit security code.



• Secondary security code allows temporary access for guests or service personnel

• Touch pad is uncomplicated for young children and simple for seniors to use.

• Alarm sounds after three consecutive incorrect security code attempts.

• Available finishes include Lifetime Polished Brass, Satin Nickel and soon will be available in Venetian Bronze (Q1).

MAG Retrofit Solutions

MAG does not make the locks, we make them stronger.

Our complete line of retrofit solutions for today's electronic locks is now complete, from our original Door Reinforcer to the 9" and 14" one -sided remodeling plates. So, whether you are replacing an existing lockset or want to add strength and design to a new application MAG has your solutions.



Marks USA New Distinctive Key In Lever Locksets

Marks USA introduces its ANSI grade 1 and 2 Survivor series key-in-lever cylindrical locksets in two distinctive lever designs. The American design has an angular return and the Crescent with a smooth rounded lever, both returning to within 1/2" of the door surface. Both



designs feature the Clutch mechanism, which prevents forced entry and damage to lock by disengaging lever from lock before damage can occur. Marks locksets feature lifetime mechanical warranty. All Survivor locksets are UL Listed for 3-hour fire rating, and satisfy all ADA requirements.

Medeco Residential Hardware Demand Increases

The Medeco residential family of locks and hardware has expanded to more than six styles, four standard finishes, and includes retrofit cylinders for most existing door hardware.



Medeco's latest residential addition includes a low profile mortise cylinder and a new antique brass finish. The new low profile mortise cylinder not only creates a great look in the new Helena and Parliament models, but also serves as the perfect retrofit for Baldwin hardware. In addition to the range of finishes, the new antique brass

finish matches most manufacturers 09 finish, which is ideal for adding deadbolts to existing hardware for increased security.

Medeco's residential product line ranges in style from classic to ornate and includes the strength and high security features of its commercial door security products. The residential products prevent unauthorized key duplication, resist physical attack, and exceed UL437 standards.

Scorpion Locks

Ease of keying and use of standard key machines for duplicating keys makes the SCORPION CX-5 a convenient, cost effective system for residential, commercial and institutional applications.

Numerous unique side-mill configurations are available to



locksmiths and institutions on a geographically controlled basis. Offering a high degree of key control, the CX-5 key blanks distribution is strictly controlled ensuring the highest level of secure key control.

Purview Door Hardware, Inc. offers a complete line of conversion high security products, including Interchangeable Core cylinders, UL 437 patented Mortise/Rim Cylinders, and UL 437 patented KIK Cylinders and deadbolts.

SELECT Hinges™

Select now offers stainless steel pin & barrel continuous hinges in addition to its aluminum geared continuous hinges. Our performance-proven geared hinges have endured 18,000,000 cycles (and still counting) in ongoing testing at an independent lab. That's more cycles than most doors see in a lifetime. Exclusive Pair-Matched[™] hinge



leaves, anodizing after all machining and Teflon® and graphite lifetime lubricants eliminate hinge maintenance and assure trouble-free, quiet performance. Select geared hinges reduce maintenance headaches and cost by outperforming traditional hinges in schools, offices, airports and public buildings.



GET FREE STUFF! From May 1st through December 31st 2005

For nearly half a century, HPC has been the leader in the design and production of key machines. HPC's extensive line of computerized key machines, code machines, and duplicators offer the right machine for every application. All HPC key machines are manufactured in the U.S.A. to exacting specifications, using top quality components, assuring you of the finest in key cutting equipment for years of dependable service.



Key Machines

With every purchase of HPC products accumulate points to redeem for Free Stuff



Circle 229 on Rapid Reply

July 2005 • 15

ELECTRONIC HARDWARE

Aiphone Takes Strides Into Access Control

Aiphone Communications announces they have successfully embedded HID® ProxPoint® and I-CLASS[™] readers into several of their more popular door stations. These "all-in-one" door sta-



tions eliminate the need to have proximity devices mounted next to the intercom at an entryway or on a stanchion. Aiphone units are compatible with both ProxPoint® and i-CLASSTM credentials.

CompX's Access Control Electronic Lock

CompX Security Products is proud to introduce the CompX eLock. The eLock is a stand alone, access control electronic lock with a gear driven latch. Powered by four AA batteries (6 volt), the eLock can be mounted on cabinet doors and drawers, Medical carts, patient files, hospital/pharmacy refrigerators - anywhere access control is needed or required.

The eLock comes in five models: keypad, magnetic stripe, proximity reader, magnetic stripe/keypad, and proximity reader/keypad. All eLock units are compati-



ble with 12-volt door strikes. Supervisors can add and delete users at the unit or they can utilize the optional LockView[™] software. All eLock units come with 250 user slots.

The Windows™ based LockView™ provides: audit trails of up to 1500 access attempts, time based restrictions, dual credential requirements, assign access rights between users/ supervisors and eLocks in the database, and create user groups. Integral to the eLock is a low battery indicator and a 9-volt "jump start" battery port, which allows the user, with a valid credential, to access the eLock when the four AA batteries are exhausted.

OSI RentalLock®

OSI Security Devices and RentalLock present the RentalLock® RL100. This system combines the industry's most sophisticated code-encryption software and proven electronics! Manufactured in America, the RL100 provides the superior features and quality that you have come to expect from OSI. RentalLock's design allows property managers, resort owners, realtors, or timeshares the ability to control access to properties without ever having to require check-in, cardkey issue, or expensive key and key-cylinder re-keying and replacement.

Users simply visit RentalLock's website and select a desired property from an array of



available properties. After selecting a property and desired dates, software generates a code that will provide access to the selected property for the dates and times desired. Upon expiration of this time period, the code re-combinates and access is no longer granted to that code. It's as simple as that!

Videx

Videx announces that CyberLock® electronic cylinders can be used in the Abus® 83 Series key-in-knob and Rock padlocks. CyberLock adds access control capabilities to Abus padlocks, allowing schedules to be set for specific people at certain times. Keys and cylinders record a history of user activity that can be downloaded for management review.



Abus 83 Series padlocks accept a CyberLock, Schlage® 6pin type, weather-resistant cylinder. The Abus Rock, which is popular in European markets, can be retrofitted with the CyberLock weather-resistant Scandinavian oval. Both of these CyberLock cylinders have a special sealed design that prevents water and debris from entering the cylinder. These padlocks are ideal for securing transported freight, gated areas, and expensive equipment at remote sites.

No batteries or wiring are needed to install a CyberLock cylinder, as the battery in the key powers the system. Each time a CyberKey opens a padlock, a record of the user ID, date, and time is stored in both the lock and key. Keys can be programmed to limit access to certain locks at

16 • Visit www.TheNationalLocksmith.com

specific days and times. In addition to padlocks, there are over 70 different types of CyberLock cylinders that can be used in doorways, cabinets, safes, and a variety of other applications.

ELECTRONIC SECURITY

IR Schlage Security Management System

IR Security & Safety's Electronic Control Systems (ECS) announces the release of its new IR Schlage security management software, which offers access control, digital video capture, badging, visitor management, alarm monitoring, security touring and other security applications tailored to every end user.

The new security management system meets banking data center security standards. It views, acknowledges and secures all alarms, defines an unlimited number of alarm con-



ditions, sends alarms to predefined workstations in order of priority, emails appropriate recipients and receives videos of alarms. The IR Schlage software supports both online and offline credentials and lets users design and edit badge layout.

Using the new software in conjunction with video systems, users are provided convenient searchable criteria, easy distribution of video clips, and immediate retrieval of transaction or alarms and associated video clips.

Wireless systems use less hardware and install five to ten times faster. With Schlage wireless systems, it becomes extremely easy to retrofit electronic access control solutions in facilities and applications that have previously held back due to budget constraints or installation limitations. Importantly, the wireless system easily integrates into all existing access control systems and customers can continue to use their existing keys or ID credentials

NAPCO Power Supply

Platinum Power[™] from Napco Security Group is a new line of high performance power supplies and power accessories for burglary, fire, access control and CCTV applications. All Platinum Power supplies carry a lifetime warranty.



Now you can cut plastic up to '4' thick, aluminum to '6' and mild steel to 18 gauge with one rugged, portable power saw. Weighing just 5 lbs., Kett's new KS-221 Panel Cutting Saw maneuvers easily and cuts quickly and quietly. It's perfect for cutting gutters, siding, autobody panels and sign making materials. Recause the KS-221 cuts clean, without burrs or burn, you can also save valuable fabricating time!

Powered by a rugged 120 volt AC, 4.5 amp, 2500 RPM double-insulated electric motor.



The Kett Tool Company 5055 Madison Road Cincinnati, OH 45227-1494 (513) 271-0333 FAX: (513) 271-5318





Circle 230 on Rapid Reply

July 2005 • 17



The Platinum Power line includes AC and DC power supplies for 4 to 16 cameras, highcurrent power supplies/chargers, timers, relay modules, chargers, distribution boards and access controllers, timers, relay modules, chargers, distribution boards and access power controllers. The Platinum Power Supplies feature attractive, heavy gauge metal enclosures and field-replaceable, automotive-style fuses.

Voice Alert By Cross Point Ind.

For areas without doors and keys, a wireless notification system may be the answer for homeowners looking to stop theft in open outdoor areas before a break-in occurs. Some people think that just because a carport or porch doesn't have a door on it that they can take anything that isn't nailed down The Voice Alert system combines wireless infrared sensors with a speaker/receiver that allows the user to record up to six individual messages. When a sensor is triggered by activity, a signal is sent to the receiver/speaker and it plays the corresponding message to alert the home or business owner that an incident has occurred.



Voice Alert is a patented, wireless enunciator system that allows specific, voice-customized alert messages to be recorded for each monitored zone. It is the most flexible and feature-rich wireless system on the market. Security dealers are discovering that it's an affordable, yet valuable, addition to both residential and commercial security applications, especially in those hard-towire situations.

FURNITURE PRODUCTS

Combi-Cam™

The Combi-Cam[™] is a great solution in those environments where sharing keys amongst several people is a hassle. The combination of the Combi-Cam[™] is easily changeable and replaces any 3/4" keyed cam lock. The durable Combi-Cam[™] is solid metal, can be installed in a manner that it cannot be reset, and has 1,000 possible combinations.



The Combi-Cam[™] is available in 3 cylinder lengths - $5/8^{\circ}$, $7/8^{\circ}$ & 1-1/8" and comes standard with a pronged washer for wood applications, a 1/2" straight cam that can be placed in increments of 90 degrees and a 1-1/4" straight cam that can be placed in increments of 45 degrees. All sizes come in a chrome finish and the 5/8 cvlinder length also comes in black with white numbered dials. There is an optional 1-1/4" offset cam available that when used with the 1-1/8" Combi-Cam[™] gives a reach up to 1-3/8". An optional metal finger pull is also available. The Combi-Cam[™] can be used for a variety of applications, specifically schools and hospitals, where keeping track of keys is a hassle.

Lucky Line Introduces File-A-Key™

File a key is a clever key organizer that's easy to use and as close as your filing cabinet Keep important keys away from unauthorized personnel and safe in your filing cabinet with Lucky Line's ingenious new File-A-Key ™ system. Designed to fit into standard letter or legal-sized file cabinet drawers, these hanging storage bases are made of tough,



durable plastic. Simply snap the universal key fob into any of the receiving holes to store up to 14 sets of keys in a filing cabinet. To remove a key, just press the quick-release button. File-A-Key[™] is perfect for apartment buildings, business parks, office managers and property managers. You have your important files organized. Now it's time to do the same with your keys! Preprinted and blank labels are included.

Lund Dual Lock Key Cabinet

Lund Key Cabinets are manufactured from 18-gauge office furniture steel with electrically welded construction. They are finished in a durable, baked on gray enamel. Lund Equipment offers more



than 70 different styles of key cabinets and files with capacities from 10 keys to over 3000 keys. They are one of the last manufactures that still make large, high capacity key cabinets. Lund has floor cabinets that organize up to 2280 keys and four drawer (file type) key cabinets that will hold 3312 keys.

The dual locking key cabinet uses a single tag key control system. There are no numbers on the key hooks, in a two-tag system all hooks are numbered by labels that fit over the hooks.

The Lund key Cabinet shown requires two keys to access it completely. It has a locking exterior door, as well as an inner compartment that locks with a different key The hinged outer panel holds 100 kevs. The inner compartment holds 50 keys and is designed to provide two levels of access security in a single cabinet. The model shown is 17-1/2" wide x 25"high x 2-3/4" deep. Other sizes are also available.

Olympus® Lock, Inc.

Olympus[®]. has added a new product to its line of innovative pin tumbler cabinet locks-the new Olympus 920LM/DM Series cam lock to accept Schlage®compatible large format interchangeable cores. The 920LM/DM Series may be used with: Schlage Quad, Numbered Section, Schlage Classic, Schlage Primus or Schlage Everest large format IC cores, Keymark IC cores. and Mul-T-Lock IC cores.

The Olympus 920LM/DM IC core cam lock will directly retrofit our standard 720LM/DM



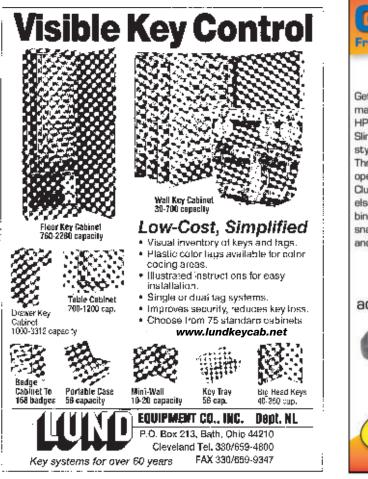
Series small format IC core cam lock. The 920LM/DM may be purchased in either US26D or US3 finish and is sold less core.

Key-retaining or non key-retaining functions, as well as the ability to lock left, right, up or down, can be obtained through the various cams and shifters that are shipped standard with the product. The same cams and shifters that work with our 720LM/DM cam lock will also work with the new 920LM/DM Series lock. This product also includes standard in the package our anti-rotation plate for a more secure installation in particleboard and a plastic actuator to functionally test the lock without a core.

KEYS & KEY ACCESSORIES

GE Introduces Key Organizers

The Key Organizer is a wallmounted cabinet featuring three convenient cups on the outer



Circle 252 on Rapid Reply



visit www.hpcworld.com/freestuff for details

Schiller Park IL 60176 USA

www.hpcworld.con

Circle 231 on Rapid Reply

AUGUNIT



door that hold everything from key rings and chains to cell phones and wallets. Inside, the formal spare key storage system offers 12 removable key tags with labels for long-term key storage and easy identification. The easy-to-mount Key Organizer keeps everyday items and keys right where users want them, ending the hassles of locating misplaced items and simplifying long-term key storage.

The wall-mounted Key Strip offers a convenient way to access and manage keys used on a daily basis, storing spare keys in an organized manner. The Key Strip keeps all keys in one place in plain sight. It holds up to ten sets of keys, enough for even a large household.

The Locking Key Cabinet Is an attractive pushbutton locking key storage system that organizes both daily-used and infrequently used spare keys. Its battery-powered electronic locking mechanism provides up to 19,500 changeable combinations.

It has ten adjustable peg hooks for short-term storage and seven removable key tags with labels for long-term storage. The Locking Key Cabinet features a modern cabinet design with a spring-loaded door, which mounts easily with provided screws. A low battery indicator lets the owner know when batteries need changing. The Key Cabinet is a non-locking version of the Locking Key Cabinet with all the same features except the electronic lock.

Regional Painted Keys From Kaba IIco

Painted key assortments are available on a 332 regional basis from Ilco. According to the company, the regional assortments make it easier to sell customers in specific areas. For the regional program, the U.S. is broken into 10 different regions, including New England, New York/New Jersey, North Central Atlantic, Southeast, Mid Atlantic, Central Great Lakes, South, Midwest Plains, Pacific Southwest and Pacific Northwest. Each assortment includes a three sided. rotating POP display with 84 hooks, headers and reorder cards. The display fits in less than one square foot of counter space. Assortments contain the most popular professional sports teams, college teams, military keys and personal keys in individual markets.

KEY MACHINES & Accessories

Bianchi 303 High Security Duplicator Redesign

The Bianchi 303 duplicates high security laser and dimple type keys. The robust construction and innovative design results in an extremely durable, precise and easy to use key cutting machine. The 303 is the tank of its class at 51lbs and the heavy one-piece casting reduces vibration resulting in less noise, longer cutter life, and better-cut consistency.

In addition to the concentric electromechanical calibration capable of precise adjustment in all directions, micro-switch activated cutter, large protective shield, and code cutting capabilities, several improvements



have been made. A few of these include semiautomatic cutting, hand rest for better stabilization during cutting, illuminated directional arrows added to ease calibration, longer lasting and brighter LED style light along with a restyled cover and tool compartment.

GIL-RAY Sharpening Service

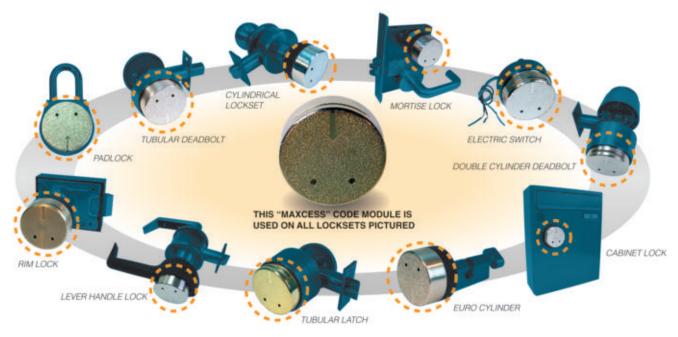
An investment in sharpening is a good value considering the much higher cost of replacement cutters. Gil-Ray Tools offers a mail in sharpening service. Key cutters sharpened by Gil-Ray are precision ground to original manufacturers' blueprint specifications the same way that cutters are brought into specs during manufacturing. Gil-Ray does not use any acid or vapor blasting processes, which can damage the precision cutting edges.



According to Gil-Ray, all styles, types and brands of cutters can be sharpened like new, and many can be sharpened five or six *Continued on page 22*



NEW "MAXCESS" REPLACEMENT CARD-OPERATED CYLINDERS ADAPT TO MOST LOCKSETS AND PROVIDE INSTANT CODE CHANGES WHEN CARDS ARE LOST.



ATTEND A FREE TRAINING CLASS AT OUR ALOA BOOTH #1017. ONE CLASS EACH HALF HOUR.

YOU CREATE BOTH CARD AND LOCK CODING WITH SIMPLE TOOLS AND LEARN MASTERKEYING, ALL IN 20 MINUTES.

TAKE HOME THE "MAXCESS" LOCK AND CARD THAT YOU CODE AS A GIFT... A \$100.00 VALUE!



WHEN YOUR CUSTOMERS NEED A SINGLE MASTER-CARD TO MANY DIFFERENT TYPES OF LOCKS, REPLACE THEIR CYLINDERS WITH "MAXCESS". --- YOU CODE THEM --- YOU CONTROL THEM. ---



THE MAXCESS CARD

TO LEARN MORE ABOUT "MAXCESS" AND BECOME AN AUTHORIZED DEALER: VISIT: WWW.MAXCESS-CARD.COM USA OFFICE: 800-713-4823

* MAXCESS type cylinders are on all doors in 70 Military Base Schools in Japan, Korea, Guam, Europe, USA. 75 Dormitories on Bases in Japan, Korea, Europe, USA. 5000 Dependent Family Housing apartments in Japan and USA, plus Hotels, Offices and Recreational Facilities. Military specifications on request.

> MAXCESS CARD SYSTEMS LTD. Licensee of CorKey Control Systems Inc. Circle 257 on Rapid Reply

Continued from page 20

times before replacement is needed. All Code Cutters, Duplicating Cutters, Flat Slotters, and End Mills can be sharpened. Sets of Code Cutters can be sharpened with matched diameters so that they can be interchanged like new wheels are on Code machines.

HPC Switch Blitz

The Switch Blitz[™] combines the best of both worlds. It is a Blitz[™] code machine combined with a semi-automatic duplicator. Now in the bench space of 1 machine you have 2 top-quality key machines.



The Switch Blitz[™] is equipped with HPC's latest features including the Quick Nut and Easy Flip Shoulder Gauge with Safety Switch. It comes with 3 cutters and 150 code cards and are available in 120VAC, 240VAC, 12VDC, and AC/DC.

Locksmithing Unlimited SARGENT Punch

A mass produced keypunch machine is now available for punching SARGENT keys to factory specifications. Built on the PRO-LOK chassis, the machine will cut both left and right key sections in both 6 and 7 pin key blanks. Based on information on the correct factory specs for



angles and tolerances, which were obtained from the SAR-GENT factory, the machine from Locksmithing, Unl. LLC can punch SARGENT factory original nickel silver or aftermarket key blanks. Not requiring any electrical power, the lightweight portable punch machine requires only a push of the handle to cut keys. The punch generates SARGENT keys easier and faster than using a standard duplicating machine.

MISCELLANEOUS PRODUCTS

DoorKing Introduces Auto-Spike System

DoorKing has added a new auto-spike/barrier gate operator system to its line of parking control products. The auto-spike system is designed to provide increased traffic lane control in applications where bollards or crash barriers are not practical. Parking lot operations are constantly on the lookout for vehicles being stolen from their lots, patrons running checkout booths, etc. The DoorKing autospike system provides a simple, easy to install cost effective method to control traffic exiting or entering a lot, and will disable the vehicle by flattening its tires if an unauthorized exit occurs.



The modular system consist of a power transfer box that mechanically links the spikes to the barrier arm operator, 2 or 4 foot tunnel sections, 3 or 6 foot

spike sections and an end cap. An optional stop / go traffic light and mounting post is available that signals the driver when it is safe (green) to proceed. DoorKing's auto-spikes are designed as a modular system allowing for easy flexibility in different applications and easy installation. Since the spikes are surface mounted onto the roadway, installation is quick and simple in either existing or new applications. Autospikes are ideal for parking lots, rental car agencies, schools, car dealerships, government applications, or at any site where a higher degree of traffic control is preferred.

Lynk IC Classes At ALOA

William M. Lynk, CRL will be teaching two full day classes on interchangeable cores at the ALOA convention this summer. Small Format Interchangeable



Cores will be taught on Wednesday July 20th and Large Format Interchangeable Cores will be taught on July 21st.

MBA USA

MBA USA has added hundreds of new items to their product lines in the past year.

The IKON Hook Bolt #ZSS-MO360 can be mortised into sliding doors, cabinets, boat hatches, and many other installations.



Positive deadbolt action gives extra security.

Mil-Comm Military-Grade Lubricant Technology

Mil-Comm Products Co., Inc.'s Lock Saver, is a synthetic, non-toxic

lubricant protectant, delivers a light coating of a proprietary, PTFE-based polytetrafluoroethylene formula that treats metal surfaces to ball-bearing smoothness. This extreme performance grease is designed to thrive in diverse climates - from corrosive saltwater and humidity to sandy and extreme cold environments Lock Saver provides a long-lasting treatment of lubrication that greatly reduces parts friction and wear, while driving out moisture and minimizing build-up. And since it is free of petroleum or silicone, Lock Saver will not gumup. It is also generally harmless to wood, rubber, plastic and composite parts.

Lock Saver is available in grease or oil, as well as the Lock Saver cleaner/degreaser in a pump spray.

SearchAlert Classic CCL

The SearchAlert Classic luggage lock from CCL Security Products has a security window that changes color from green



to red when the Transportation Security Administration (TSA) secured access device is used to open the lock, or when an unauthorized person has opened the lock using a counterfeit opening device. The security window lets travelers know if their luggage locks have been opened and whether their bags have been searched by a TSA agent, or violated by an unknown person. If a TSA agent hand searches a piece of luggage, the agent will leave a TSA notification of baggage inspection in the bag. If the window is red, and no official notification is in the luggage, the traveler should take the bag to the airline's luggage claim office to determine if anything is missing or if anything has been added to the luggage. No SearchAlert lock should be cut off by TSA agents.

Continued on page 26



you're gonna need some sharp bits.

Big job or small, save time and money with the drill bit sharpener that really works.

- · Restores bits to factory sharp in less than 60 sec.
- Sharpens full range of bits, even split point
- Sharpens 118° and 135° -point, 3/32"-3/4" bits
- Tough 1.75-amp motor

"With the Drill Doctor, our bits come out perfect every time. And it's LOTS faster than hand sharpening. It's easy to use. It sets itself up for the right angle. You just put the bit in, turn it a few times and it's done—with no guessing. AND we always get optimal performance out of our drill bits."

— Mike & Carol Oar Elmer's Lock & Safe Medford, Oregon

1-888-MYDRHL (693-7455) Web: www.DrillDoctor.com

Circle 265 on Rapid Reply

The Drill Bit Sharpener

NOW EDGETM KEY CONTROL KEEPS YOUR





Introducing Edge[™] key control: the patent-pending system that brings

customers back to you — only you — again and again.





Edge fits American Lock® and Master Lock® commercial security products, as well as other makes.

CUSTOMERS COMING BACK.



What a great way to gain new customers and lock-in business for years to come!



Unlike costly "high security" systems, Edge lets you offer the kind of security a multitude of businesses need for door locks, padlocks — the works.

No one can duplicate keys without their consent. And no one

can duplicate keys for them but you!

Repeat business you can "own."

Edge key control prospects are everywhere — local restaurants, strip malls, utilities, hospitals, municipalities, neighborhood stores, franchisees ... the list goes on.

Edge lets you deliver the key-control security they want — and can pay for. Year after year after year.

Ask your distributor about Edge key control today.



© 2005 American Lock Company, a Division of Master Lock Company

PADLOCKS

Master Lock 10 Padlock Wall Station

Master Lock is offering a new single-piece, covered padlock wall station that is virtually indestructible and offers secure access for authorized users only.

The No. 1483B wall station is designed to stand up to use in an industrial setting and features a patented pending locking hinge that allows the cover to be opened and held in the "open" position, for easy access. In addition, the cover can be closed and secured with a Master Lock padlock.



The wall station comes with a choice of Master Lock Xenoy 410RED, laminated steel 3RED or American Lock Aluminum 1106RED padlocks. The wall stations are available in a four-lock set No. 1482B, 10-lock set No. 1483B or 20-lock set No. 1484B. The mounting holes for the 10 and 20 lock stations are spaced 16" on center to allow mounting to studs.

The Wall Stations are part of the Safety SeriesTM lockout products from Master Lock.

SAFES & SAFE PRODUCTS

A & B Safe Corporation Cash Controller

The WS-30-9 is the latest addition to an already extensive line



for depository safes and chests. This multi door safe is equipped, as standard locking mechanisms, with mechanical combination locks and or dual key locks. The safe can also be equipped with the LaGard Smartlinc, which can provide control of all the doors from one control unit. The new locking and control system also has many security features and provides audit of all activities.

Advance Metalworking Co. Lo Riser Inclining Platform Trailer

Stop, Drop and Load your cargo faster and more efficiently with a new Lo Riser Trailer featuring a 74" x 14' 8" load carrying platform that can be hydraulically lowered to ground height with a flip of the control switch. When lowered, the trailer allows a minimum 5 degree angle ideal for low ground clearance or reduced grade ability vehicles. The simple operation, unique flexibility and enhanced safety allow for one person to load and transport up to 10,000 lbs of cargo.



The Lo Riser Trailer is constructed of HSLA steel, not angle or channel iron, easily providing approximately a 4 to 1 payload to trailer weight ratio. Six "D" ring tie-downs and the built-in tiedown rails provide added security for various types of cargo. Diamond plate flooring, LED lighting with 7 pin connector and electric brakes on both axles complete this package.

The Rental Package includes an on-board battery with charger. Other options include aluminum wheels, spare tire and wheel with carrier, cargo winch and special paint.

Buddy Products Drawer Safe

Buddy Products is proud to introduce for 2005 the Drawer Safe, item #3212 - one of the many electronic safes that are now available through Buddy. The Drawer Safe can easily fit into any drawer or mount to any wall! Securely store cash, jewelry, stocks, bonds, etc. while keeping valuables within reach at all times. A shelf is included for ample storage space.



Heavy-duty 11 gauge steel construction and programmable electronic keypad make this Drawer Safe extremely secure. Felt with pressure sensitive adhesive lines the inside walls and shelf. The faceplate removes to reveal a backup key lock in case of battery failure, two keys are included. Mounting hardware included. Uses four AA batteries, not included. Unit measures 11-7/8"w x 4-7/8"d x 14-7/8"h.

Bullseye SD Replacement Lock

The new Bullseye B175 lock replaces many older Diebold safe deposit locks. It can readily match the bank's guard key by removing the guard levers from the old lock number 175-05 and placing them in the B175.



Where guard levers are not available Bullseye's number B175GMK (guard match kit) can be used to match the guard key. The B175 is furnished either Right or Left hand. The locked box is opened by pulling the customer lock nose, replacing the guard levers and installing the new B175. No need to leave the Job site.

Bullseye sells replacement locks for most S.D. Box locks.



Fort Knox Security

In an era that sees safe manufactures experiencing the need to have the lowest price to get sales, Fort Knox Security Products continues to perfect perfection; especially the Guardian Series.

New this year to the Guardian Series is a standard reinforced fire door. This addition nearly doubles the fire protection of the Guardian, moving it to 1680 degrees in 90 minutes. With the reinforced fire door, patented star corner bolts, a 5 to 1 reduction rack and pinion multi-gear drive locking system and our four stage, high luster baked acrylic urethane metallic finish, the Guardian Series sets the standard for the rest of the industry.

The precise production practices, allow Fort Knox to offer the industry's only true Lifetime warranty; which



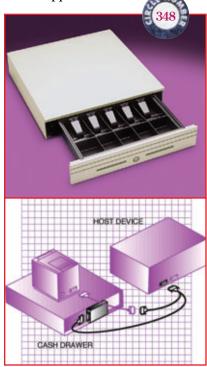
includes the Sargent and Greenleaf locks. This warranty is the icing on the Guardian Series. The Guardian safe by Fort Knox proves that a low price is never a substitute for true protection.



Circle 283 on Rapid Reply

Indiana Cash Drawer Introduces New Interface

Indiana's new SPI interface has been designed to provide a simple means of attaching and operating cash drawers with computers and other devices capable of RS232 serial or parallel communications. Features of this new product include: serial and parallel interfaces in one unit; a built-in self-test feature; single or double ASCII character opening codes (DIP switch selectable); LED indicators for trouble shooting or diagnostics; detachable interface cable; and external power supply for universal applications.



In serial applications, the interface supports 2400 or 9600 baud rates. Serial units can also monitor drawer status. For parallel applications, cash drawers can be utilized as in stand-alone configurations or daisy-chained.

Kaba Mas The Auditcon Legacy

The Auditcon® family of electronic locks was developed to address the security requirements of a broad range of retail, commercial and industrial markets. Utilizing the award-winning



PowerStar[™] technology, the Auditcon's security cannot be compromised by outside manipulation and provides unprecedented audit capability, making it an effective deterrent to internal theft. The newly released Auditcon 2 Series locks offer improved serviceability, faster power-up, and up loadable programming. The Auditcon 2 Series locks will make securing your valuables easier than ever.

La Gard's Completely Private Electronic Entry

LA GARD introduces the PRI-VATII electronic entry device. For use with LA GARD's Dual-Handed Swingbolt locks, Deadbolt locks or Redundant Mechanical locks, the PRIVATII offers the ultimate in electronic lock security.

The PRIVATII features an LCD readout that prevents unauthorized viewing during code input as well as accommodating right or left hand programming and code entry. Approved for use by the Australian Government, the new PRIVATII can be used with all of LA GARD'S electronic locks leaving the mix and match options entirely up to the individual user. The PRIVATII uses one user-supplied 9V Alkaline battery



installed in the outside battery compartment for easy access.

Perma-Vault Cash Till Safe

Perma-Vault Safe Company's "B" Rate PV 2020 Cash Till Safe features a half-inch thick steel door with bolt-work and quarterinch thick steel body and weighs a nominal 265 pounds. The safe has outside dimensions of 20"h x 20"w x 20"d and inside dimensions of 19 1/2"h x 19 1/2"w x 17 1/2"d. Available with either a digital electronic lock or dial combination lock, the safe has four holes in the bottom to secure it to the floor. An adjustable shelf is standard with the safe.



S&G Biometric Keypad

Sargent and Greenleaf's new biometric keypad is designed for a quick and easy retrofit upgrade to S&G electronic locks. Top mounted fingerprint technology for easy accessibility. Backlit LCD display makes set up and operation simple, even in low light environments. Set for fingerprint only, PIN only or fingerprint + PIN access control. External two-battery compartment makes battery changes a snap. Available in a variety of finishes.



SOFTWARE

Securitron Door Control Wizard Version 2.0 CD

Version 2.0 contains three integrated applications and a host of resources designed to meet the needs of installers, integrators, spec writers and architects. The applications include the Door Control Wizard, the Magnalock Bracket Wizard and the Quick Product Selector. Resources include product instructions, product catalog, product images, architectural drawings, tech tips and wiring diagrams.



The Door Control Wizard application allows the user to build and save UL approved door control systems using Securitron products by responding to a comprehensive series of questions related to each door opening.

The Door Control Wizard also features a Palm enabled software module that changes the way security professionals perform site surveys. Users can walk an entire facility, or several facilities with a Palm compatible PDA and select all of the Securitron components they will need, again by door or by job, with a maximum of 300 configured doors able to be recorded for PC download.

The Wizard's advanced editing is a huge feature. Job specs can change with any installation. The Wizard can keep pace with these changes whether it's in the office or in the field.



Circle 282 on Rapid Reply

The Magnalock Bracket Wizard is also a question-oriented application. It is designed to quickly and easily identify which brackets are needed to safely and securely mount any of the company's most popular electromagnetic locks in any single or double door application.

The Quick Product Selector application allows the user to select any quantity and combination of product from more than 450 Securitron SKUs in a convenient "shopping cart" environment. Users can create customized materials lists for themselves, their field employees, or for customers down the street, or across the country. Like the Door Control Wizard. these selections can be saved and edited, or printed for simplified order fulfillment at a Securitron supplier.

The Door Control Wizard CD was designed for the beginner to the seasoned Securitron veteran. Prompts are simple to follow and

A NOTE FROM THE CIRCULATION MANAGER

I don't want you to be left out... but sometimes we do run out of back issues. Please be sure to send in your **Renewal Payment** on time and your **Change of Address** at least 4 weeks in advance. Then you won't be the one receiving a note saying, "Sorry, we ran out."

Send your name, old address and new address to: The National Locksmith Address Change Dept. 1533 Burgundy Pkwy. Streamwood, IL 60107. buttons are easy to use. All Wizard application questions feature "learn more" information and each door system is visually assembled for the user on-screen as product selections are made.

TOOLS & ACCESSORIES

George Blake's Interchangeable Extractor Tool

The Pencil is an improved interchangeable extractor blade holder that is designed to remove broken keys from lock cylinders. Manufactured by George A. Blake, CML, the tool can take up to 101 pounds of pulling force as tested on a calibrated machine before the extractor blade separates from the handle. According to the manufacturer, the pulling force is over three times the force of other tools currently on the market. Two of the most common extractor blade diameters .040 and .050 are included and can be stored in a compartment inside the handle, which is large enough to also hold a locksmith's own assortment of straight wires and poke tools.



Designed to fit in most lock pick cases, the tool has jaws which allow the extractor blade to be easily removed and replaced with a different size extractor blade or a smaller diameter wire, and features a knurled surface on most of the steel handle for additional gripping power.

PRO-LOCK Headspec's

Multi-Purpose Head-Wearing Magnification Glasses with Dual Light Sources! 4 different magnifying choices and 2 lights built all in one HEADSPEC.



Just flip the lens of your choice in any combination to achieve the magnification level necessary for the task at hand. Magnifications available: 1.8x, 2.3x, 3.7x & 4.8x.

Ideal for impressioning, close observations, precision inspections, miniature parts, assembly checking circuit boards, reading resistors, detail work, reading and much more! Uses 2 AAA batteries (not included) per light.

Drill Doctor DD750

The Drill Doctor DD750 has the ability to sharpen multiple point angles 3/32"-3/4", and is versatile enough for professional craftsmen and tradesmen who work in metals as well as wood. The DD750 can sharpen both standard twist bits as well as self centering split point bits, it is also equipped with a replaceable dia-



mond sharpening wheel enabling you to re-sharpen high speed steel, carbide, cobalt, titanium, Tin-coated, and even expensive masonry bits. The DD750 is so easy to use that in fewer than 60 seconds your drill will be sharp. AUTO-SECURITY PRODUC

ASP, INC. • P.O. BOX 10 • REDMOND, WA • 98073 • PH: 425-556-1900 / FAX: 425-558-1205

NOT TOR

GENERAL MOTORS

A-41-152

ANTION 2003-019

T. attanta

Battan

1.1520.

I

F

2004

BASP

Automotive

Transponder

Systems

witteen try, Mitchael Hyd



GENERAL MOTORS

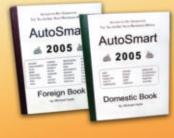
Buick: Terraza 2005-up, Cadillac: SRX 2004-up, STS 2005-up, Catera 1997-up, Chevrolet: Aveo 2004-up, Cobalt 2005-up, Colorado 2004-up, Malibu 2004-up, Uplander 2005-up, GMC: Canyon 2004-up, Pontiac: G6 2005-up, Grand Priz 2003-up, Lemans 1988-up, Montana 2005-up, Pursuit 2005-up, Saturn: Relay 2005-up

AUTOTEI

Vehicle Database for

the Security Industry

Books & Software



Tertimeter |

AT LODGE

1.1000.

D-fatter

**** [] .******

C.

1

ANN.

1.000

R

1.0000.

B.man.

1

() .max.

1.100.

R

Batter

1.100

..... D

[].m.

Automotive Software

Price: \$165.00

1

AutoTel '05 Update \$69.95 Nissan SuperCode \$298.00 Mazda PIN Code \$450.00

AutoSmart '05 Books Foreign & Domestic - \$75.00

BLOWOUT SPECIALI

Automotive Transponder Systems Book (Thru Nov. '05 - Reg. \$75) Special Price: \$45.00

Y=li

PIN CO

Circle 212 on Rapid Reply

ansponder

orum - PATS 2 REG



HPC, Inc. has been a part of the locksmithing community since its incorporation in 1956. Its focus has always been on creating innovative, quality, American-made products that help make locksmiths' jobs easier. Since HPC's inception in 1956 through 2003, HPC was run by Jerry Hoffman. Although Jerry is no longer actively involved in the business, his presence is felt strongly in HPC's creative product design, product quality and business integrity. Jerry's youngest daughter Francie Hoffman, the President



Following in the footsteps of her father, Francie Hoffman, the President of HPC, is the third generation of the Hoffman family in the locksmithing industry. (Photographed in front of her father's extensive antique key machine collection.)

of HPC, continues to run the company in the same tradition as her father.

HPC's original location was on the north side of Chicago. After significant growth, HPC moved to its current location in Schiller Park (a few minutes from O'Hare Airport). They added to their manufacturing space again in the early 1990's by purchasing and connecting the building next door. The two buildings cover over 50,000 square feet.

HPC's product line started with the first mass-produced

picks. Prior to this time, picks were made by filing down metal by hand, which aside from being tremendously tedious was an inaccurate science. Harold Hoffman (Jerry's father) developed a die to punch perfectly shaped picks every time. This method is how HPC continues to

manufacture many of the picks in their product line today.

Currently, HPC's product line is quite vast. It consists of eight different categories: Key Machines, Software, Key Cabinets, Picks & Pick Sets, Car Openers, Books, Door Guards, and Specialty Locksmithing Tools.

American-made and proud of it, HPC designs and manufactures over 95% of its products in their Schiller Park facility. All HPC Key Machines are manufactured and assembled



HPC's CNC machines mill a wide variety of parts to within .0002" of tolerance. Here, robotic arms square, drill, and ream all edges and holes in a Blitz[™] casting (body) before assembly. Completing all of this work in one session creates perfectly aligned openings and makes parts connect and work smoothly together.

32 • Visit www.TheNationalLocksmith.com



Like the other CNC machines, HPC's turning center takes computer generated blueprints and produces accurate replications all day long. The turning center spins, grinds, and cuts round products and parts, like handles, bushings, and shafts. Many of these small parts are hidden from and overlooked by the end user but it's because of their accuracy that HPC is able to build high quality products.



Accuracy is very important to HPC. All parts have blueprints and the initial pieces of each run are checked and rechecked by a Quality Assurance Specialist to make sure that they match those blueprints. This happens before the run can continue being manufactured. HPC states they are committed to producing products that you can depend on.



HPC's patented 1200CMB Blitz[™] machine is the "Standard of the Industry." Every Blitz[™] machine is assembled with great attention to detail. The machines are put through a rigorous testing process before they are packaged for shipment. HPC notes the Blitz[™] machines are built to last.

Are you stressing...

about all those excuses to your customer regarding the three holes that you have to drill in his door (oh, no... please don't let this be another leased property or another \$600 oak door)...









OSI Security Devices phone: 619.628.1000 fax: 619.628.1001 www.omnilock.com sales@omnilock.com



Relax... Use OMNILOCK products and leave your drill in the truck.



Eraclio is one of HPC's many long-time employees. He has been with HPC for over 30 years. His experience is a huge asset when assembling high-tech key machines like the Blue $SHARK^{TM}$. The Blue $SHARK^{TM}$ (introduced in 2002) is a fully-automated robotic key machine that contains millions of codes.

in the factory by specially trained key machine technicians. Over half of HPC's employees have been with the company for over 10 years and several employees have been with HPC over 25 years.

All HPC employees are members of HPC's Quality Assurance team. All members of the team are responsible for making sure that HPC's products always maintain the highest level of quality possible, before the product ever leaves the building.

HPC's success throughout the years, is due to their passion for producing revolutionary original products. HPC notes that they are the original inventor of the Slim Jim[™], Under & Over style of car openers and Through-the-Car



HPC's Switch BlitzTM was introduced in 2003. Based on the patented 1200CMB BlitzTM machine, the Switch BlitzTM effortlessly combines code cutting and duplication. The Switch BlitzTM U.S. patent is pending. **34** • Visit www.TheNationalLocksmith.com



Door Guards go through a final inspection before being shipped to Authorized HPC Distributors. HPC wants to make sure these Door Guards look as good on your display as they will on your customers' doors.

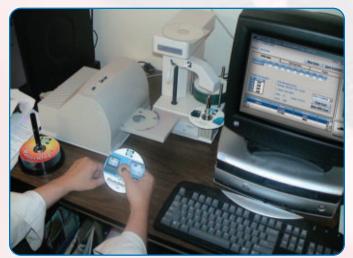


HPC's Speedex® series key machines are some of the finest duplicators available. These economical machines are sturdy, accurate and like all HPC Key Machines, manufactured and assembled with pride in the USA.

Continued from page 34



Code cards are necessary to virtually every lockshop. HPC's patented code card system provides pin-point accuracy. The code cards are designed meticulously via engineering CAD software. This method enables the printed card to greatly exceed tight tolerances.



With 15 software titles designed for the locksmith industry, HPC is a leader in security information processing. Here is one of the HPC software technical support team members checking CDs before they are duplicated.



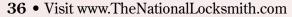
There are many steps in creating high quality car opening tools and HPC doesn't miss any. From using the right raw materials and proper finishes to efficient manufacturing and quality control procedures. Consistency has made HPC a top choice in vehicle opening tools.



Security Storage cabinets and boxes are quickly and methodically assembled, and packaged to make room for the next job. From wall safes and fire extinguisher cabinets to KeKabs that lock with mortise cylinders or digital locks, HPC cites great satisfaction in knowing they produce sturdy and innovative storage containers that locksmiths can resell with confidence.



HPC has manufactured and sold tens of thousands of 1200CMB Blitz machines, the majority of which are still in use today. The new BlitzTM on the left is ready to be shipped out and the 1200CM on the right is in for its 25-year checkup.





You wouldn't guess that an item as simple as a pick set goes through at least four separate inspections during its production, before reaching your door.

style of car openers. Plus, they pioneered the way for computer based locksmithing by being the first to develop Windows® based locksmithing software and CodeMax[®], the first computerized key cutting machine. However, the product name that HPC is synonymous



When calling HPC, these are just a few of the people you may speak with. Along with these people, there are many more behind the scenes that together create the products you use every day. Everyone at HPC would like to thank the locksmithing community for allowing them to provide you with the tools of your trade for almost 50 years.

with is 1200CMB Blitz[™]

machine. The patented 1200CMB Blitz[™] machine has been the "Standard of the Industry" since HPC began producing it in 1978. Its unique characteristics have stayed the same throughout its 27-year history. With the needs of customers' changing over the years, HPC has made enhancements to the machine that help get the job done faster and more efficiently. HPC has manufactured and sold tens of thousands of 1200CMB Blitz machines, the majority of which are still in use today

HPC has been around since the beginning and continues to strive to create products that fill the needs of all locksmiths, whether they are new to the industry or are seasoned professionals.

For more information contact:

HPC, Inc., 3999 N. 25th Ave., Schiller Park, IL 60176, Phone (800) 323-3295, (847) 671-6280, Fax (847) 671-6343, Web: www.hpcworld.com, E-Mail: hpc@hpcworld.com. Circle 357 on Rapid Reply

Bonding Information!!

You are invited to purchase a \$15,000 Bond Certificate and Bond Card along with your subscription. For a \$17.00 charge you will receive a Certificate and Card personalized with your name.

Previously, we could only Bond the individual subscribing to *The National Locksmith*. Now, however, we are able to Bond any of your employees as well as you, the actual subscriber. These additional personalized Bonds are available at \$25.00 each.

If you already have a Bond, you will receive notice to renew your bond. You will receive this notice in the mail several months before your Bond expires.

New subscribers: To receive a Bond, please follow the instructions below.

To order bonds, send a sheet with your name, address, city, state, zip and phone number (or that of the person to receive the bond), include a check or money order for the appropriate amount, and mail to: The National Publishing Co. 97592 Eagle Way Chicago, IL 60678-9750



2004 Toyota Solarə

By Brook Francisco & Michael Hyde of National Auto Lock Service, Inc.



The new Toyota Solara is the second generation of the popular sport-coupe first introduced in 1998. The first generation of the Solara had an optional transponder key security system, while the new 2004 model has it standard on all models. Although this car uses the X217/TR-47 keyway with the new 10-cut 50,000-69,000 code series, the immobilizer chip in the key has been changed, so an Ilco Toy-43 BT4 or Jet TR-47 PHT will NOT work for this vehicle. Only the dealer key will work for this car. The locksmith can originate keys for this vehicle if all are lost without the use of the scan tool by replacing or resetting the separate immobilizer ECU (Toyota part #89780-AA010) and the use of the correct dealer key blank (Toyota part #89785-08020 - Master and, 89786-08020 - Valet key). In this article we will be resetting the chip in the separate Immobilizer ECU with the For Uploading Binary Numbers (F.U.B.N.) IC Programmer unit. Unfortunately, all on-board key registration has been eliminated for this model, so at this time the dealer scan tool is needed to duplicate keys.

2Notice the small dot on the key blade near the head of the key. This indicates that this car uses a new immobilizer chip, and is not compatible with the older Toyota transponder key.

Opening the 2004 Toyota Solara



3Opening the 2004 Toyota Solara is not difficult. Toyota has done a better and better job over the years of shielding the linkage rods in the door, so I elected to use a wedge and long-reach tool to unlock the door using the passenger's manual lock/unlock button. Begin by inserting a thin piece of cardboard between the frameless window and weather stripping. I use a piece of thick paper or thin cardboard to prevent damage to the vehicle door or weather stripping.



A Next, carefully insert your wedge between the window and vehicle body. This car uses a frameless window, so you will need to be extra careful when performing this step, especially in cold weather.



5Now insert the long-reach rod in the gap created by the wedge between the door glass and the vehicle body.



6 Guide the reach rod to the manual lock/unlock button.



Pull the button towards the back of the car to unlock the door.

Combination Locks for Cabinet Doors





301 West Hintz Road Wheeling, IL 60090 Telephone: 800.733.8588 Fax: 847.537.1881 www.cclsecurity.com

D900 and D901 Features

- Wood or Metal Applications!
- Easily Resettable Combinations!
- Easy to Read Numbered Buttons!
- Easy to Use Molded Thumb Turn!
- Numerous Combinations Available!
- Easily Retrofits Existing Locks!
- User Friendly Installation Instructions!
- Mechanical: No Batteries Needed!
- Easily Adapted to Doors or Drawers!
- Brushed Chrome and Brass Faceplates!
- Latex Free for Hospital Use!
- Stock Items Available!

Circle 217 on Rapid Reply

Continued from page 38

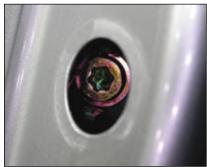
Door Lock Removal / Disassembly



8 The driver side door lock is the only external lock on the 2004 Solara. The lock is easily removed without pulling the door panel. Although there is no code stamped on the lock, a working key can be generated from this lock with only a small progression.



9On the edge of the driver's door even with lock, you will see a black rubber grommet.



10 Remove this grommet to reveal a Torx 27 screw.



11 After loosening this screw, the
cylinder can be removed.the hous
needed t**40** • Visit www.TheNationalLocksmith.com

12^{The} lock cylinder removed.





13 There is a number "d3505" unfortunately this is some type of production code and not a key code.



14 To disassemble the door lock, begin by removing the outer plastic trim piece and gently prying off the face cap with a small flatblade screwdriver. The face cap will be re-used.



15["]C" clip at the rear of the cylinder.



16The cylinder can now be removed through the front of the housing. A working key is NOT needed to disassemble this lock.



Ve can see that this lock contains tumbler positions 2-10. Remember that Toyota wafers are stamped opposite of their actual cut. The wafers I pulled from the lock were stamped: 34212112. To do the fill in InstaCode, I entered ??21343443 (? = Unknown Cut). InstaCode's Cutting Tree revealed 9 different possibilities that could exist, but only two keys total would be needed for the full progression. The code for this key was 61060, the eighth possibility. The two first missing cuts were a 3 and a 2. A.S.P. part number for this pinning kit is A-30-113.



18 The door lock and all components.

Glove Box Lock Removal / Disassembly



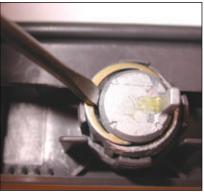
19 The glove-box lock is easily removed and disassembled, but only the last 4 wafers are stored in this lock, so it is pretty useless for any type of progression.



20Begin by removing the two Phillips screws on the inside of the glove-box.



21 You can now remove the glovebox lock.



22To disassemble the lock you will need to pull the handle off of the housing that holds the cylinder. You can then use a small flat-blade screwdriver to remove the "C" clip that holds the cylinder in the housing.



23The cylinder comes out the front of the lock.



24 The lock and all components. Notice the 5th tumbler to the right is the Valet cut stamped with a "3".

Ignition Lock Removal and Disassembly



25 The ignition lock on this 2004 Solara uses an Active Retainer that is common on most Toyotas. Removal is not difficult if you have a working key to turn the lock to "Accessory".



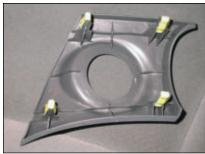
and American Express

www.fastrackhardware.com

IAGER



26Begin by removing the circular plastic trim bezel around the lock.



27 Then use a wedge to carefully pry outward and remove the larger square shaped trim piece.



28Next, gently pull outward on the illumination ring and transceiver ring. You don't need to remove it completely, just enough to allow the cylinder to be removed.



29With the key in "ACC", you can now use a 90-degree pick to depress the active retainer and remove the cylinder.

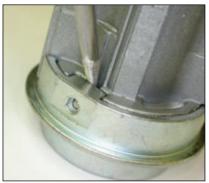


30^{The cylinder removed.}



31 The ignition lock found on the 2004 Toyota Solara is similar to many others found on today's Toyota and Lexus vehicles. The most significant design development with this new generation of ignition lock has been the introduction of the improved hardened face cap that is secured by three solid roll-pins. With one trick, disassembly is pretty simple.

The first step is to remove the three solid roll-pins that secure the hardened face cap to the lock housing.



32Two of the roll pins are fairly easy to remove. Insert a sharpened drift punch between the lock housing and the back of the rollpin at an approximate angle of 55 degrees. The idea is to get the punch to make contact with BACK of the roll-pin and push it forward.



33Hit the punch sharply with a hammer. The punch should push the roll pin slightly forward. Note the position of the roll-pin as it has been pushed forward.



34Next, insert a hook pick behind the roll-pin and push it out further. You don't need to remove the pins completely, just push them out enough so they have clearance over the lock body housing when the face cap is removed.



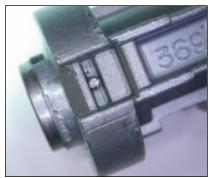
35 The third roll-pin, located at more difficult to remove because there is no easy way to push it out from the back.



36After securing the lock HORIZONTALLY in a vise, use a drift punch and a hammer to PUSH this pin DOWNWARD into the softer metal of the lock housing.



37You will be able to feel the pin "sink" into the housing. Don't go crazy, you just need to push it down far enough to allow clearance for the face cap to come off.



38After this third pin is pushed down the face cap will easily come off the front of the lock.

Stainless or aluminum.

Shipped in 48 hours.



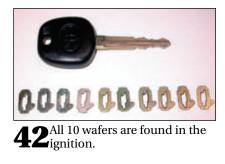
39Use pair of long nose pliers to remove the remaining pin. It will come out easily.



40^{Use snap-ring pliers to remove the circle-clip at the rear of the cylinder.}



41 The lock cylinder will now come out the front of the lock. The ignition lock is shown disassembled.





Choose the timeless appeal of stainless steel pin & barrel continuous hinges when you need the look of stainless.

SELECT ALUMINUM GEARED.

Choose the clean line and unbeatable durability of geared continuous hinges, proven in independent lab testing.

SELECT FAST SHIPMENT.

Choose either style and we'll ship it within 48 hours.



Geared to ship in

SELECT Products Limited 800-423-1174 www.select-hinges.com

JRS TH



Circle 272 on Rapid Reply

Removal of the Immobilizer ECU and Registration



3If all keys are lost for this vehicle, you can generate a working key if you replace or reset the separate Immobilizer ECU (located above and behind the glovebox, Toyota part # 89780-AA010) and registers a new dealer key (Toyota part # 89785-08020) to the new or reset Immobilizer ECU. It still must be synched to the Engine ECU, but this can be done easily. The separate Immobilizer ECU is located behind the glove box. You will need to remove the glove box to gain access to the Immobilizer ECU. Begin by removing the plastic nut that secures the trim piece to the car frame below the right side of the glove-box.





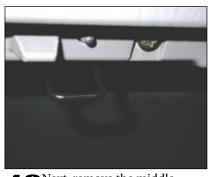
45Now remove the 10mm bolt that secures the lower right side of the glove box to the vehicle frame.



46Next, remove the Phillips screw securing the lower left corner of the glove box.



47There are three Phillips screws on the upper edge of the glovebox assembly. Remove the left corner screw.



48Next, remove the middle screw, directly to the right of the glove-box strike.



49 Finally, remove the glove-box assembly's right upper-corner screw.



50You can now remove the entire glove-box.



51 With the glove-box removed, you will now be able to remove the Immobilizer ECU.



52The Immobilizer ECU is bracket that holds the glove-box strike. This bracket is welded perpendicular to a large body-rigidity bar that runs the horizontal width of the vehicle. There is a single 10mm bolt that holds this Immobilizer ECU to the TOP of this smaller bracket.



53The Immobilizer ECU removed. **Continued on page 46**

44 • Visit www.TheNationalLocksmith.com

GATE\$ == DOOR\$ TO GREATER PROFIT\$

MAGNA LATCH

Innovative Child Safety Gate Latch

- #1 child safety gate latch in the world!
- · Award-winning, patented magnetic technology
- Unprecedented safety, reliability & child resistance
- Self latching and key-lockable
- No mechanical interference to closure
- Horizontal and vertical adjustability
- Tested to 400,000 cycles

LOKK•LATCH

s & operates from eith

The Ultimate Security Gate Latch

Just one of the security products in our range, the innovative Lokk•Latch PRO[®] is the most sophisticated privacy and security gate latch ever devised. It is *the* privacy latch that locksmiths and security businesses have been raving about!

- Locks and operates from either side of the gate
- Durable polymer and stainless steel = no rust
- · Effective for residential and commercial gates
- Rekeyable 6-pin lock can be master-keyed or maison-keyed
- · Lock can be replaced with a high-security cylinder

When you do a safety audit, remember that gates are additional doors to greater profits!



Circle 219 on Rapid Reply

LIFETIME

7731 Woodwind Drive, Huntington Beach, CA 92647 Tel: (800) 716-0888 Fax: (800) 464-6400 E-mail: info@ddtechusa.com Web: www.ddtechglobal.com

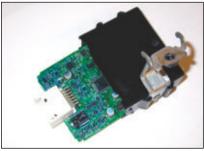


See us at ALOA - Booth #1707

Resetting the Immobilizer ECU using the F.U.B.N.

54By resetting the Immobilizer ECU, you can return the unit to auto-learn status. It will automatically learn the next key after it is re-synchronized with the vehicle. Begin by prying off the cover.

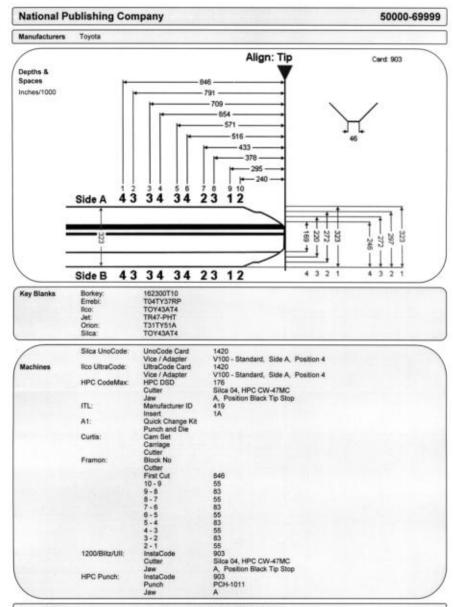




55You can now remove the circuit board.

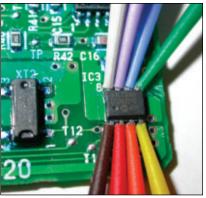


56The Immobilizer ECU and all components.



Code 50000 Bitting 4334342312





57^{The correct chip to reset is the IC3, chip type 93LC66}

C:\TOY ENTER FILENAME ->04sol.bin

58After you write the correct file (04SOL.bin) to the chip, the Immobilizer ECU will be restored to auto-learn mode.



59The FU.B.N. confirms the data correctly.

After installing a new or reset Immobilizer ECU, the following steps must be taken to synchronize the Immobilizer ECU with the Engine ECU Synchronization:

 Using a piece of wire sconnect terminal 4 (CG) and terminal 13 (TC) of the vehicle's OBD-2 connector.
 Turn the ignition switch to the "ON" (do not start the engine) position for 30 minutes.
 Turn the ignition "OFF" and remove the wire.

4. The car is now in Auto-Learn mode, the security light should remain on. (5505) Insert any keys you wish to register into the ignition key cylinder for one to two seconds, then remove. You can register the master and valet keys in any order because the ECU can differentiate between the different types of keys.

5. In this Auto-Learn mode the car will recognize 4 keys, 3 masters and 1 valet. If you want to register less than 4 total keys you can close the cycle by turning an already registered master key "ON" and "OFF" in the ignition 5 times in 10 seconds. A maximum of 5 master keys and 3 valet keys can be stored, but you need the scan tool to add these additional keys.



Circle 228 on Rapid Reply



Adam Weinraub

Buick Terraza & Cadillac STS



Buick • Terraza

Year: 2005 -

Linkage: Horizontal

Pick: CCW DSO

Tool: AO-36

"MCOT-Long"



Buick • Terraza

PREFERRED OPENING METHOD

This is a new model Minivan for 2005. Front doors have a black plastic shield covering the horizontal



rods, which makes a cavity opening method more difficult. Same as Chevy Uplander, Pontiac Montana SV6 & Saturn Relay.

1. Insert a Pump Wedge at 11" from the front edge of the window glass of the front passenger door. Inflate wedge.

2. Insert an AO36 "MCOT-Long Tool" at 7" from the front edge of the window glass, tip facing forward. *(Photo 2)*

Tool: AO-36 "MCOT-Long"

3. Lower the AO36 10" into the door

48 • Visit www.TheNationalLocksmith.com



Buick • Terraza Photo 2.



cavity. Rotate the tool beneath the bottom edge of the window glass. Deflate wedge.

4. Lift the tool, gradually working the tip of the tool into the vehicle interior. Rotate the tool 135° counterclockwise and position the tip of the tool in front of the lock-unlock button. *(Photo 3)*

Buick · Terraza Prioto 5.

5. Rotate the lock-unlock button rearward to unlock the door

ALTERNATE OPENING METHOD

1. Insert a Pump Wedge at 11" from the front edge

of the window glass of the front passenger door. Inflate wedge.

2. Insert an AO32 "MCOT-Wide Extra Long Tool" at 7" from the front edge of the window glass, tip facing forward.

3. Lower the AO32 10" into the door cavity. Rotate the tool beneath the bottom edge of the window glass. Deflate wedge.

4. Lift the tool, gradually working the tip of the tool



into the vehicle interior. Rotate the tool 90° counterclockwise and position the tip of the tool on top of the electric lockunlock button.

Buick • Terraza Photo 4.

5. Push the

electric lock-unlock button down to unlock the door. *(Photo 4)*

Cadillac • X3

Year: 2005 -

Linkage: Vertical

Pick: CCW DSO

Tool: AO-7 "Astro Tool"



Cadillac • STS

PREFERRED OPENING METHOD

This is a new model sedan for 2005. Replaces the Seville. This vehicle has cable linkage.

1. Insert a Pump Wedge at 3" from the front edge of the split window divider of the rear passenger door. Inflate wedge.



2. Insert the small hook end of an AO07 "Astro Tool" at 1" from the front edge of the split window divider, tip facing rearward. *(Photo 2)*

3. Lower the AO07 10" into the door cavity. Tilt the handle of the tool 45° to the front of the car until you feel contact with the vertical rod.

Tool: AO-07 "Astro Tool"

4. Position the tip of the tool under the vertical rod. Twist the tool counter-



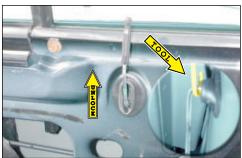
Cadillac • STS Photo 2.

clockwise to bind the rod.

5. Lift the vertical rod gently to unlock the door. *(Photo 3)*

ALTERNATE OPENING METHOD

1. Insert a Pump Wedge at 10" from the rear edge of the window glass of the front passenger door. Inflate wedge.



2. Insert an AO34 "MCOT-Narrow Tool" at 8" from the front edge of the window glass, tip facing forward.

Cadillac • STS Photo 3.



3. Lower the AO34 into the door cavity. Rotate the tool beneath the bottom edge of the

window glass. Deflate wedge.

4. Lift the tool, gradually working the tip of the tool into the vehicle interior. Rotate the tool 45° counter-clockwise and position the tip of the tool on top of the electric lockunlock button. *(Photo 4)*

5. Push the top portion of the electric lock-unlock button to unlock the door.

This material was excerpted from "The Best Damn Car Opening Manual Period!" by PRO-LOK. For more information and availability check with your distributor or Phone: 714-633-0681; Web: www.PRO-LOK.com



by Sala Probasco

The Continuing Care and Feeding of Employees

S o, you've found somebody to work for you, and you're in the process of training them to do what you hired them to do. Now what?

Well, there are two very important questions you need to address early on:

- 1. What do you really want from your employee(s), and
- 2. What do they really want from you?

For most of us, our primary objective in hiring someone is to have a live body in the store who will work for a reasonable wage and help us whittle down the stack of work that's been piling up. Right? But what about your new employee's objectives? They may be a whole lot more complicated than that. What's more, he/she may not fully realize what they are, themselves.

(By the way, I hope you won't mind if I use masculine pronouns—not that women don't work in locksmithing (I do! I do!), but simply because it saves having to type in the he/she, himself/herself thing all the time.)

Authorities in job-relations claim there are ten main qualities most people want from their jobs qualities we as employers, should be acutely aware of. Employee's want (though not necessarily in this order):

- 1. To work for an efficient boss or manager.
- 2. To be encouraged to think for themselves.
- 3. To see the end results of their work.
- 4. To have interesting work to do.

- 5. To be kept informed regarding their own area of work and the broader picture.
- 6. To be heard when they ask questions and/or voice opinions.
- 7. To be respected.
- 8. To be challenged on a regular basis.
- 9. To be recognized for their achievements, however small.
- **10.** To have ongoing opportunities to develop skills.

We need to listen to our employees. Sometimes they know things we don't about such things as customer dissatisfaction or employee successes on the job. Help them solve their problems, but reward them for work well done. It doesn't have to be anything big. Bring them souvenirs from conventions, take them out to lunch, give them some surprise time off with pay, send them to a seminar in an area of expertise where they've shown interest and aptitude. There a numerous ways to say, "Thank you." Look for some.

Encourage teamwork among your employees, rather than competition. Back-stabbing or insider gossiping, you don't need. Keep them informed of business plans and goals, challenges and opportunities. Let them know how their individual performance contributes to the overall business plan, so they realize they're an important part of the big picture.

It's been said, "People support what they help to create." Involve your employees in seeking solutions for problems, when these occur. Always keep in mind that "orders" issued from the top are generally met (thought sometimes grudgingly) with compliance, but solutions created by those involved are embraced with the kind of commitment you want from your employees.

In training new employees, you need to know what they need to know. The best way I know to determine this is to ask them. But be prepared for a variety of responses, and don't shrug off any of them. One business owner I know turned a poor office worker into a good performer when she responded to such a question by saying that what she needed most was to know who had the key to the supply closet!

When considering what skills your employees need to develop in order for your business to remain competitive five years from now, the most important lie in the area of commitment—commitment not only to the policies and procedures of your business, but to the job itself. One thing you don't need is the hassle of frequently replacing employees. It takes too much time, energy, and money to do this, not to mention the resulting drag on company morale.

If you have an employee with promise, nurture him.

Keep in mind that most people remember very little of what someone tells or shows them, but a great deal of what they actually do themselves. Get

InstaCode 2005

Locksmith Management Software

InstaCode Software has changed to fit new market demands. The software is now offered as a base package, with available add-ons. The base package contains all the codes, card printing, electronic key machines, find partial bittings, cutting trees, graphical layouts, etc.



				38
Eede				- 10
Manufacturer	-		×	100
-				
Charl				
Kay Black	Site	4	· Find for	
Catilhumber	butuCole		14	100
Look Type:	44	*		1.00
Kay Tape	48			1.00
ion:				- 35
	- Pee	Autority Tips	110	
Tachida dasar "Shaw Prada	tana, sikita ana di Katagi Tapat ^a ata	ter setup butter mit bom	and and well the	

Base Price \$695

Fed

\$200 for 1 Module

\$300 for Both

Add-Ons Include...

Car Opening & Transponder Information/Programming

MasterKeying

Triax Communication Module \$395 Additional Users Above Three

\$185 each

DEMO DISC! Run InstaCode for 10 days. Only 10 bucks!

all modules.

System Requirements:

InstaCode is supplied on CD ROM and comes complete with an easy to follow step-by-step instruction manual. InstaCode requires 64MB of free RAM and 100MB of available Hard Disk Drive space, mouse or other pointing device and one of Windows NT, 2000, XP or 2003. Floppy disk images are included on the CD ROM so you may make your own set of floppy disks if required.

Pocket InstaCode requires a Pocket PC (not included) with 64mb RAM running Microsoft Pocket PC2000 or later. Contains all the codes but not all the features of InstaCode. Call for details.

Subscribe to InstaCode, as low as \$25.00 a month!

Order or subscribe at www.TheNationalLocksmith.com

Call us at 630-837-2044 to order!

Continued from page 50

your people involved in appropriate activities, discussions, skill building. (We've found that local area, and state locksmith associations can provide valuable assistance in this direction.)

Be patient and consistently encouraging. Children don't learn to talk all at once. They have to say the same things over and over, under someone's patient corrections, until they get it right. The same is true with adults, only more so. As we grow older, it takes most of us longer to understand and accept new concepts and develop new skills. The good news is, adults tend to retain the information better, so it's worth the effort, if you're willing to take the time.

The real test of learned skills is their application. After each development activity, ask the employee how he will apply this new skill or information on the job. Then follow up to see if they're living up to their intentions. Patiently encourage

	ITL PRESENTS
	The Industrial ITL9700 Code Machine Super bearing construction. Superior rigidity and accuracy. Shipped with carbide cutter. 2 year parts and labor warranty. Increased cut rates: Standard mode
	 Im. 9600 Computer Key Machine Up to 800 built-in manufacturer depths and spaces. Works with most popular Master key systems. Serial port to communicate with user systems Repeatable accuracy of 1/1000th inch. Dependable heavy duty construction. 1 year parts and labor warranty. Cuts Medeco™ High Security keys with angled cuts. The ITL 9000 was built by locksmiths – we know what you wanted so we built it. When a new lock comes out you add the space and depths immediately. No Mechanical adjust- ments. All sealed and prehybricated bearings.
	 Windows™ interface for built in Masterkey system printing and saving. Domestic car codes included. Both 12 volt and 120 volt usage standard. One cutter emulates all flat widths. Four line display with menus RS232 communication port. Repeatable accuracy +/002. 1 year parts and labor warranty. Over 500 manufacturers depths and spaces built in. Finds, loads and cuts a car key in 15 seconds.
Call for your introductory CD or video 888-264-6627 USA	TO OLS LIMITED Now Distributed Throughout USA, Canada & Australia 2639B Progressive Way • Abbotsford, BC Canada V2T6H8 562-699-0060 • Canada: 604-852-8904 • Canada Fax: 604-852-8938 • Toll Free: 1-888-264-6627

them, and keep in mind that some of the most important lessons we learn in life area a result of making mistakes. Employees who are encouraged to learn from their mistakes and continue trying will develop initiative and selfconfidence. Those who feel punished learn not to try again, or even worse, they deny making a mistake and/or try to conceal what they've done, instead of correcting it.

One of the most difficult aspects of the employer/employee relationship is that of delegating responsibility. You hired the employee because you needed help doing the job. Now that you've got him on the payroll, you're finding you not only have to spend time doing your own work, but you must teach him his, plus answer a bunch of questions and help him undo his mistakes.

Over and again I hear business owners say, "It takes him all day to do the job when I could have it done in half the time and without the hassle of answering all his questions. I'd rather just do it myself." That's true, in the beginning. But hey! You didn't learn this business overnight. He'll catch on soon, if you let him know you have faith in his ability, encourage him to take initiative and allow him to solve problems on his own. Before you know it, there'll be a whole lot less for you to do. And after all, isn't that why you hired him in the first place?

Now, put a smile on your face, get out there, and train somebody to do what you need them to do. In the long run, you'll be glad you did!

Looking for more in-depth information to help you master "The Business of Locksmithing."? Sara Probasco is now offering a limited number of "encore" presentations of her important full-day seminar to locksmith meetings and conventions across the U.S. and western Canada. For more information, have your area, state, or regional locksmith-association representative contact her at <u>SPro@hilconet.com</u>.

56 • Visit www.TheNationalLocksmith.com Circle 239 on Rapid Reply

What are you looking for in Key Storage?

Capacity?

HPC KeKabs range in capacity from as few as <u>8</u> keys to as many as 730 keys.



Expandability?

Many of HPC's KeKabs take expansion leaves so your storage capabilities can grow as your needs increase.





Shape?

HPC offers specialty Kekabs to fit in spaces where others cannot.



Security?

HPC offers Kekabs with flat key and tubular key cam locks, T-Handle locks, dial and digital combination locks, and locks that accept mortise cylinders to meet all of your security needs.



Convenience? HPC's line of Key Keepers g

HPC's line of Key Keepers give you <u>on site</u> storage of keys where you need them.

Functionality?

HPC offers a complete line of Single-Tag KeKabs, <u>Two-Tag</u> Kekabs, and specialty software for keeping track of keys.









KeKab® is a registered trademark of HPC, Inc. Visit HPC's website at www.hpcworld.com for more information.



Circle 234 on Rapid Reply





t's been just over two years since Master Lock a c q u i r e d American Lock, and, last fall, most of the American Lock

by Jake Jakubuwski

Jakubuwski plant operations in Crete, Illinois were relocated to Master Lock's sites.

How does that translate to the locksmith who sells and services padlocks? And more importantly, what does it mean in a market where many locksmiths perceive mass-market retailers and home centers have an unfair competitive advantage over them when selling padlocks?

It translates well, and means plenty.

Locksmiths are the core of the company's security business, and in a recent visit to the new, modern headquarters in suburban Milwaukee, Wisconsin, it became apparent that Master Lock is committed to the locksmith. A whole team of personnel are dedicated specifically to the locksmith security trade.

If that's the case, you may ask, then why is Master Lock in the mass merchant stores and how is the locksmith expected to compete with mass merchant pricing?

While the Master Lock brand will have continued presence at mass-market retailers and home centers, the locksmith will have distinct products designed specifically for them and their market. And the product line for locksmiths is the cream of the Master Lock crop, offering superior security features and flexibility not found at the mass merchant stores.

"Our vision is to be the company locksmiths turn to for the finest in security products and services," said Dave Kraninger, product manager of the commercial business team at Master. On the team along with Kraninger are Tom Campbell, director of marketing of the commercial business, Dave Love, vice president and general manager of the commercial business, the sales management team comprised of Darlene Samplaski, Greg Pinson, Mike Quillin and Paul Switzer, and Billy Edwards, key records manager. They, in turn, have dedicated personnel to support the American and Master brands.

The new Master and American approach is definitely a team

approach. For the first time in Master's recent history, locksmith marketing, sales and all business related functions are on the same floor in the same building, making synergies between departments much easier. In turn, that means faster customer service when locksmiths or distributors call.

The team's vision goes far beyond providing just padlocks, and Master is investing



1. Safety lockout products.



resources in the locksmith channel. According to Kraninger, the company has a strategy to help the locksmith sell new concepts to their customers, such as offering accessories to accompany the safety lockout padlock market (*figure 1*), and more customized value-added products such as custom-keyed, key-controlled and custom marked products. These are products only locksmith can effectively offer their customers.

Service is the backbone of what the locksmith can offer his customer. That service includes support in master keying and key charting, locksmith training, make-to-order capabilities, custom marking, and more. That type of service is not being offered by mass merchants and home centers, and serviceable locks are rarely sold in those channels.

While in the past Master Lock and American Lock were intense competitors, today's Master Lock team has taken the best of both and molded them into a unique offering for the security market. Solid-body construction, long a staple at American, stays with the American Lock Brand. American is the premium line and will move forward under the moniker, "The Locksmith's Lock," *(figure 2)*. Master is the high security commercial brand, and will take "Tough Under Fire" even deeper into the market, (*figure 3*).

Locksmiths have the ability to upsell their customers on the benefits of better security and serviceability. Merchandising displays available to the locksmith will help carry that message to the locksmith's customer. American Lock brand merchandising (figure 4), is distinctly different from Master Lock (figure 5), although each works well into most locksmith storefronts, taking up less than two square foot of floor space. What's best is those interested in a merchandis-Continued on page 62





Emergency Response Kit: Deluxe soft case, Super Air jack, One Hand jack, Super One Hand Jack, Glass Man, Rubber wedge, Remote control Button Master, Mighty Max 2 piece Long Reach tool ,Flexible Long Reach Tool Sale Price # ERK \$129.95



Value Set: Standard Soft Case, Two Volume Car, Truck, and SUV Opening Manuals, 12 Chrome Tools, Tough Wedge, Wedgee Wedge, Strip Savers, Super Strap Tool, Slim Jim, Training Video. Item# AM04VS- \$119.95

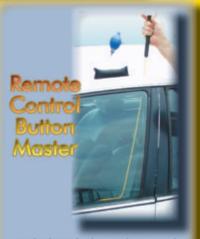


The lightning Rod[™] uses the same shielded glow in the Dark technology as the SQM long reach tool, but includes a Lighted tip that illuminates the inside of the vehicle so you can see what you're doing in the dark or through tinted windows. Sale Price Item# LR \$39.



One Hand Jack Set: Shielded Quick Max Long Reach Tool, One Hand Jack Tool, Air Jack Air Wedge, Super Strap Tool, Carrying Case. Sale Price #OHJS4 \$54.95





Unlocks vehicles with Vertical Buttons. Just Hook the door lock button with the loop, and pull on the control knob. Sale Price Item #RCBM \$22.95

Free Stuff with our Master Locksmith Set





- Unlocks Virtually Every Vehicle From a VW Bug To a Mack 18 wheeler
- Most Complete up to date Lockout set on the Market
- 100% money back guarantee!
- Lifetime Tool Replacement Guarantee
- Included 2006 early release vehicles!
- 1600 Page manuals with Photo instructions and Diagrams!
- Includes 30 tools making every opening a fast easy opening

FREE AIT Jack AIT Wedg

The best air wedge on the Market, made from Ballistic Nylon with special Stiffener for easy insertion!

ee One Hand Jack To?

The One Hand Jack™ works in conjunction with our Air Jack to make emergency openings fool Proof!

Our Long reach tool is exible and Coated with a Scratch free Polymer .

Makes unlocking vehicles with fremeless windows and cabled locks quick easy and sares

Free Truck Opening

Our exclusive Medium and Heavy Duty Truck opening set, unlock every truck even 18 wheelers

Free Information Manual

Our information manual has code information, key blanks, space and depth and more!

rree Lock-Out Video

See openings from outside as well as inside the vehicle, nothing else like it anywhere!

High tech Tools • 1628 N.W. 28th Street • Miami, FL. 33142 • 305-635-1011 • Fax 305-635-1015 • www.hightechtools.com

12

INFORMATION

Continued from page 59



4. American Lock brand merchandising.

ing display can custom order the products of their choice to stock it. This allows the total flexibility of stock up to the locksmith, not the manufacturer.

Using the merchandiser as a tool to educate its customer, the locksmith will also be able to show a customer why certain locks should be used for specific purposes, and will be able to emphasize that many of these products are only available from him. The merchandisers will also have multipacks with keyed alike locks, stressing the fact that locksmiths can develop programs where many locks can secure a facility with fewer keys. With all the merchandise customized to a locksmith's specific needs, reordering is made simple because all stocking items have the specific SKU listed on the display. When a particular hook is empty, all the locksmith needs to do is call his distributor with that specific part number to replenish his supply.

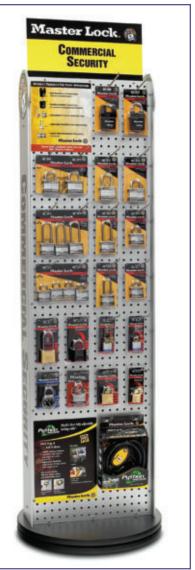
Both the Master and American brands offer the locksmith an exclusive make-to-order capability. What this means is the locksmith can have security products built and keyed to a customer's requirements within five days. The locksmith's customer can specify custom marking, such as a company logo, and can choose the size of shackle pertinent for the job. The locksmith can also choose keying with over 60 different keyways available in KD, KA, MK and GMK. These features are important because a security director may have one need to lock down his fleet of semi trailers and another need to padlock the gates surrounding his shipping paddock, but he may want all padlocks, regardless of size of shackle or body construction, to have the same keyway in a masterkey program, (figure 6). It's up to the locksmith calling on the facility to help determine the need, and then Master's team is there to help the locksmith carry out the plan.

Tremendous growth is projected in the utility and transportation markets, where Master Lock believes locksmiths can help educate their customers, such as utility companies, about the importance of securing their property, especially in today's heightened homeland security environment. In the automotive segment, growth is also projected in trailer protection, where Master has introduced specialized hitches and locks, (*figure 7*).

In the industrial safety and lockout market, both Master and American continue to develop products to help lock out industrial machinery while it is being serviced; preventing unauthorized access or use of on/off valves and switches, and other applications, *(figure 8)*. Master Lock, in fact, is actively educating locksmiths to help them capture more of this business for themselves. Industrial lockout safety is certainly a lucrative business segment for today's locksmith.

Among other services offered to the locksmith in the combined American-Master business is Lock Express, where specific orders will be ready to ship in 24 hours; custom marking, laser engraving, hard stamping and pad printing are available. Specific locksmith training is available where Master and

Continued on page 64



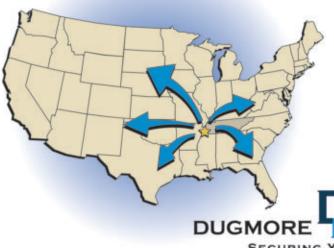
5. Master Lock brand merchandising.

Hardwiring Made Easy[™]



As part of their promise to provide innovative, fast and effective, and higher security solutions to their customers, ASSA ABLOY Group companies offer ElectroLynx, a universal quick-connect system that simplifies the electrification of the door opening.

Dugmore introduces NEW Memphis, TN location.



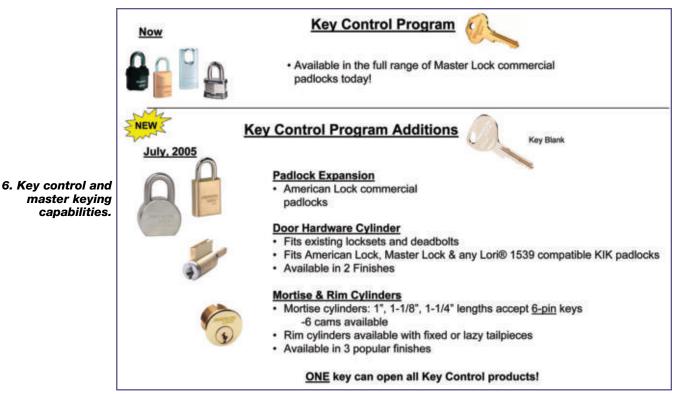
Dugmore & Duncan is committed to getting our products to our customers ASAP. Our research revealed that Memphis TN has an innovative business plan to make the most of its strategic location and natural resources. It is a multi-carrier transportation hub.

D&D has consolidated a substantial amount of its warehouse inventory into a prime Memphis location. In addition to our current strategic points of distribution, Dugmore delivers from Memphis. We are confident that this is a great opportunity for Dugmore and for our loyal customers.

SECURING YOUR WORLD



Call (888) 384-6673 FAX (888) 329-3846 • www.dugmore.com Circle 220 on Rapid Reply



American will provide technical and servicing product information to best serve the locksmith's customer. The locksmith can also take advantage of online resources, such as product information, ordering and order tracking. And of course the telephone is still available, with more than



7. Specialized hitches and locks.

75 dedicated and knowledgeable employees ready to answer the locksmith's questions.

The combination of Master and American certainly isn't the first time two major brands have come together in the locksmith market, and it certainly won't be the last. What makes this combination unique, however, is how well the two companies have blended together, with a distinct segment for both brands and a team that is positioned to help the security market grow by investing in resources, offering training, and getting customized products and merchandising support out to the locksmith in the most efficient manner possible.

For more information contact:

Master Lock Phone: 414-571-5625 Fax: 414-766-6333 E Mail: masterlock@mlock.com Web: www.masterlock.com

American Lock Phone: 800-308-9244 E-Mail: Contactus@americanlock.net Web: www.americanlock.net



8. Safety lockout padlocks for valves, switches and other applications.



North Bennet Street School in Boston, Massachusetts has been training people for employment since 1885. NBSS is known for promoting hand skills as an integral part of training skilled craftspeople. The Locksmithing Department is one of the leaders in developing professional locksmiths and has placed generations of skilled craftspeople into the work force.

North Bennet Street School Locksmithing Program Contact: www.nbss.org admissions@nbss.org/617-227-0155 x 301 e teach our locksmith students at the North Bennet Street School in Boston, Massachusetts to use only the proper methods and the best equipment to learn the trade. **LAB** pins and professional pin kits are on their benches."

David Troiano Department Head, Locksmithing North Bennet Street School, Boston, Ma.

ps: "LAB is also in my shop" Aborn Lock Service



PROVIDING THE SECURITY WORLD WITH QUALITY • Lock Tumbler Pins • Repinning Kits • Security Tools

700 Emmett Street, Bristol CT 06010

1•800•243•8242 www.labpins.com

Circle 247 on Rapid Reply





by Sal Dulcamaro, CML

compact with a relatively small footprint, *(photograph 1)*. The BD Laser is an electronic high security key cutting machine with built in key codes. It is fast and simple to set up and get started. The two main components are the key cutting machine and the display console.

he BD Laser

is a very

impressive

key machine

designed for

code cutting and

duplicating

high security

automotive keys.

It is surprisingly

Once you pull those components out of the box, all you have to do is connect a few cables and it is ready to go. There is one short cable that attaches on the left side of the machine, (photograph 2). One end of the cable attaches under the movable key carriage and the other end attaches to the port in the metal base. The detachable power cord plugs into the back of the machine and then into an AC outlet. A relatively long serial cable is used to connect the machine to the console to allow for communication of data. One end of the cable attaches at the far left in back of the key machine (photograph 3). The other end of the serial cable plugs into the lower port on the back of the console.

After a quick and simple assembly, the BD Laser is ready to

start cutting high security automotive keys. The power switch (and emergency turn off) is located on the right side of the machine. The machine is password protected with a factory default code of 1–2–3–4–5–6, (*photograph 4*).

It is best to not use your fingertips to operate the touch pad console. A stylus of your choice can be the end cap of a pen or something else conveniently available that is nonmetallic. The default code is the "Administrator Password" which gives access to more than just cutting keys. There are other features,



1. The BD Laser code cuts and duplicates high security automotive keys.



2. The short cable connects on the left side of the machine.

including auditing machine usage, that require the Administrator Password to access. The first time you enter the factory default password, the console will display a request to see if you'd like to change the factory default password. If you were setting it up for use at your shop or store, you might want to change the code to limit access and then set up separate individual user passwords.

If you enter an incorrect password, the console display screen will request that you reenter it. Five wrong attempts in a row will cause the machine to be inoperable for ten minutes.



3. A serial cable attaches to the back of the machine.



4. The factory default password is 1-2-3-4-5-6.



5. The Main Screen.

Making Keys with the BD Laser:

After entering a password, you go to the main screen (*photograph 5*). There are six options available on the main screen. There will be a new screen and sub menus whenever you choose any of those six options. At the top left corner of your main screen, you will find "KEY SEARCH". This choice takes you to all the key cutting options, for a user of the BD Laser key cutting machine.

"SETUP TEST" gives you access to key machine setup, calibrating and personal setup menus. "MACHINE DATA" gives

AMSEC

GUN SAFES

Large Selection In

Stock

Over 300

Amsee

Sufes

In Stock

Overall

Also Stocking Gardall

Fradon Lock Co., Inc. Syracuse, NY (315)472-6988 or

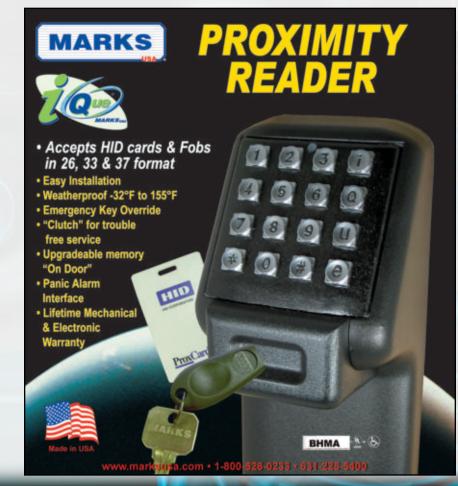
(800)447-0591 Base of Mississippi-



6. Key Search Options.

access to the machine specification information screens. "PASSWORD MANAGER" allows changing passwords, adding users and the passwords to go with them. You can delete users and audit/monitor user activity. Password data access and other password functions can only be accomplished by someone with the administrator password. "SOFTWARE UPDATE" along with connected communication ports allow for the ability to download updates to the operating software for the BD Laser. Selecting "EXIT" will allow you to shut down the machine or change user authorization.

The "KEY SEARCH" option gives a choice of four ways to select a key (photograph 6). On the top left hand corner of the screen is "CAR MODEL SELECTION". This is the best way to find the correct key when no other choice is known. At the top middle of this screen is "KEY SYSTEM SELECTION". This is where you choose by vehicle make and style of key. For example, Honda 4ET 6+6 means: Honda vehicle 4 outer surfaces each with depths in 6 positions. On the top far right of the screen is "RECORD # SELECTION". This is the quickest method to cut a key. You enter a RN (record number) which takes you directly to a specific vehicle. You just enter the RN, enter the key code and cut a key. Finally, at the bottom left hand corner, is "SEARCH BY CODE". With this choice, you enter a key code and the BD Laser will find all car makes which have that specific code. You then choose the correct car brand, model and year to select the appropriate code. The



last option is the arrow in the bottom right hand corner for "BACK TO MAIN MENU".

My choice of key cutting process was RN/Record Number and the screen that followed allowed me to enter the RN 26 for Honda Master key. That gave me a number of key cutting options. I selected "CUT BY CODE", which was the top middle icon on the screen. The console screen display then requested a code number, where I entered the Honda code number K031. The resulting screen showed a display of the cut key with key cut depth and space information. By selecting enter, the next screen display lists key blank number comparisons by brand. Tapping enter again will begin the key cutting process. Before the cutter turns on, the display will request verification that the correct jaw is inserted in the machine.

There are four color coded jaws that are included with the BD Laser, *(photograph 7)*. The red "A"





Four color coded jaws are included.



8. Make sure the key blank is seated properly.

jaw is for Honda/Acura. It is inserted from right to left into a slot on top of the key machine carriage. When slid all the way to the left the jaw can be secured with a locking lever. Choose the key blank needed and insert into the opening of the jaw. Make sure the key blank is seated flat and all the way to the key stop when you tighten the jaw, (photograph 8). Tap the "YES" icon to start the machine cutting. While the BD Laser is cutting a key, the display will indicate "CUTTING IN PROGRESS". Touching "STOP" any time in the process will stop the machine. You will then be prompted to brush away the chips and turn the key to the other side. Selecting "YES" will start the cutting process on the other side. A cut Honda key, Honda blank and another high security key blank are shown in (photograph 9).

By re-inserting the cut key, I was able to test another feature of the BD Laser. "CUT BY DECODE" is a process that can be done with any original high security automotive key. The display screen will inquire whether the key is in the jaw. If it is, you tap "YES" to start the decoding process. The console display will indicate "DECODING KEY" while the



9. High security automotive key and blanks.

decoding process takes place. After the process is complete, the unit will analyze the data and convert the information to key depths and spaces and also to a code number.

If you want to cut a key without a specific code number available, you can choose "CUT BY DEPTHS" by tapping the icon in the top right corner. The resulting screen leaves blank spaces for cuts that can be entered one by one. The BD Laser will also cut your key blank to the selected cut pattern.

The resulting touch screen for key search gives choices for key cutting processes. From the main menu, "PASSWORD MANAGER" gives you the ability to manage the security of the machine's use. Your choices for adding or deleting users give the administrator the ability to limit access to using the machine, plus auditing usage and the information drawn from that give the administrator the ability to see who is using the machine and what they are doing with it. Choosing "USER ACTIVITY", gives options as to how to search the data by user, key code or date. The administrator has access to programming and auditing functions along with the ability to access the machine for cutting and decoding keys. Individual users have access to key making but cannot access audit information and can't alter or delete users or passwords.

Selecting "SETUP TEST" gives options for setup, calibration, changing cutters and more. By choosing "SETUP" you get specific setup options. Choices include: "JAW SETUP", "CUTTER CHANGE", "CUTTER SETUP" and "TRACER CHANGE". The BD Laser walks you through each step of the various processes and makes it a snap to change cutters, tracers or just to re-calibrate the machine. Maintenance isn't much more difficult than cutting keys.

The BD Laser almost does the job of key cutting all by itself. I was amazed at how fast it was to set up and how simple it was to cut keys. Codes are built-in and can be updated through data cards, Internet access and other ways. You can also attach a vacuum hose to collect the metal chips as the keys are cut. If you have the inclination to start making high security automotive keys, I doubt that you'll find an easier way to get started. BD stands for Barnes Distribution, part of Barnes Group Inc.

For more information, call 866/267-6776 option 2. FAX: 216/592-1602. Find them online at: www.barnesdistribution.com.



An ASSA ABLOY Group company

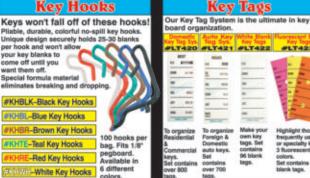
ASSA ABLOY

e Punch" Key Machine **#BP201**

Heavy duty and built to last! The Blue Punch key machine is a dedicated key punch machine designed to provide factory original keys. Creates keys with the speed of a duplicator. Blue Punch is fast, extremely accurate and easy se. The key machine is set up at the factory Th to use. to provide automatic spacing and depth. An ideal key machine for the commercial locksmith, hotels, schools and other institutions. Fast and easy to use, this key machine is precision machined to the tightest tolerances. Portable and dependable, hand operated – no electrical outlet needed. The professionals clear choice: The FASTEST and EASIEST punch

machine on the market. Dedicated punch machine. Designed to cut "factory original" keys by code Automatic spacing and depth. (formerly sold as Keymak & Armbruster.)

Key Hooks



Installation Templates Who can install a vertical rod panic bar and outside trim in less than 1 hour?

You can ... with the PRO-LOK® IN-Series Templates. Easy-to-Use, fast, precise and durable. We have assembled a group of installation templates that are all used with our Universal Clamp. You will get exacting accuracy and finished work in the same time as it takes others just to set up. Every time you use a PRO-LOK® template, your installation time will be faster, your installations more precise and professional looking. Time is money. The PRO-LOK® IN-Series Templates may be the best investment you ever make! *Reverse templates are available for the back side of the door. You can cut your time in half by not having to switch over when you are done with one side. Reverse templates also prevent splintering the back side of the door when drilling.

Locksmith Tools

PRO-LOK® offers a variety of locksmith tools to ake your jobs easier and more efficient. Each and every tool is designed or field-tested by locksmitt worldwide. Each tool is consist with PRO-LOK®'s reputation and desire of providing the industry with the highest quality tools available. From automotive related tools to impressioning tools. From screwdrivers to cylinder followers, the variety of tools offered by PRO-LOK® are a collection of and ideas from our locks ugg 186 friends nationwide.



Impressioning Magnified. If you can't see it... You can't impression it! Multi-Purpose Head-Wearing Magnification Glasses with Dual Light Sources! 4 different magnifying choices and 2 lights built all in one HEADSPEC. Magnifications available: 18x 2 3x 2 4 4 M. Uses 2 AdA 1.8x, 2.3x, 3.7x & 4.8x, Uses 2 AAA ries (not included) per light hatt

#LT300 Ideal tool to

train on key blank identificatio Forms & holds the keyway on any sample key and allows you to match the right blank every time.

Revkey/Decoder Dump Tool #LT340

Several tools in one. Clear chambers and decode. Chamber cap and retainer sleeve staking feature. Holds the key cylinder and provides a place to dump the pins for decoding or disposal. Also acts as a holding fixture for ekeying.

C Reykeying Ejector Tool #LT341

Pushes caps, springs, and pins into the removable inspection plug or empty plug chamber.

#LT342 Used on cylinders with chamber

ollower-Master Pin #LT370

ying Staking Too

Caps.

A versatile follower that can be used for

removal of upper chamber mast pins with a quick twist.

specia

#INCL

The cornerstone of our professional installation series. Holds all our ates without ecialty templates without mage to the door's finish.

al Clamp



#LT371

4 different colored diaminum follower tools to easily identify diameter. Ty

standard size followers, one small and one large diameter combine to offer a set that will service almost any pin bler lock. Also available

e Call Dispatch Book #LT430

Make it easy to track vice calls

for dispatch and billing. 3-copy NCR with w

around cover. Give one copy to dispatcher, one to service toch, and retain permanent copy in book. 200 tickets per book individually numbered.



Heat treated, chrome plated, chrome vanadium steel shafts with magnetic tips. High visibility handle, easy to locate. Net weight 3/4 lbs. (.34kg) Curved Hook • 1/8" Flat Screwdrive Offset 45⁰ Hk • #0 Phillips Screwdri

PRO-LOK "The Best Locksmith Tools That Your Money Can Buy!"

Offset 45⁰ Hk #0 Phillips Screwdriver 90⁰ Hook SD-15 Star Screwdriver Straight Pick SD-20 Star Screwdriver



Mortise Lock Installation Jig Installation Jig for Mortise Cylinders. Inclu carrying case, aluminum housing with hardware, 3 cutters (WB22, WB25, & WB27), self-centering ion, stops, long boring shaft and instructio

26 templates avai fit your needs! Alarm Lock, Arrow, Authority, Baldwin, Best,



#LT500 minum

All tool replaces plastic nut driver that comes with the Rhodes locks. Durable and easy to handle. Ide for high volume retrofit jobs. Saves valuable time

The DiskBuster #LT605

Secures disk-style padlocks in a vise to drill the shear line quickly and safely. Clamps onto most brands of disk/circular type padlocks and automatically automatically centers the shear line for drilling. Prevent the possibility of drilling your hand.



Remarkable drill jig securely clamps rekeyable padlocks to drill for the retainer screw or pin. After cylinder is removed and serviced, padlock can be reused by tapping and inserting screw in hole. (See the optional t LT612DG)

removed and serviced, replace the nut and reuse the lock ular Impressioning Too #LT705

Used to drill the security nut

on the bottom of some padlocks. Adjustable to lock body size. After cylinder is

#LT612DG

Aluminum tool for 7-pin center tubular locks. Corrosion resistant aluminum alloy. Attractive blue anodized Use with LT705 file only.

pressioning File #LT705F

Custom file for the LT705. Cuts on 2 sides, h on 2 side



Self contained trip lever self contained trip lever cylinder lock assembly glass fire cabinet doors Keyed alike to LL24. bly fis



Key Decoders

#KD01 Decoder for Kwiksel, Schlage, Weiser & Wes

cutters, aluminum doors as well, all in under five minutes! Adaptor **#INCLA**

and face-plate can be cut out with

centered on the door and accurate results are obtained every time. No other combination of tools can

mortise installations. The jig and its precision cutters will cut a mortise i

hard wood, soft wood, composite

doors and with the use of special

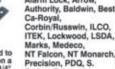
produce such fast and accurate

mortise hole is auto

The INCL is designed to

align the templates on a 1-3/4" door with a 2-3/4" et. The INCLA adapts the INCL to align the templates on a 1-3/8 door and will also al with a 2-3/8" the template backset.





NT Falcon, NT Monarch, Parker, Schlage, Sargent, Simplex, Taco, U.S. Lock, Von Duprin, Yale and more



#LT423

and accuracy.

DEPENDABILITY-BUILT TO LAST- SIMPLICITY Weslock Schlage Schlage Kwilset I/Core SeastCore Classic A2.43 Former Beesel C A4

Why Use the Blue Punch Machine? Why? Our Blue Punch machine is by far the most popular punch key machine ever built or sold!

Id it be? QUALITY-ACCURACY-SPEED-

made with automatic spacing and depth for speed

Lock manufacturers have the best technical and engineering knowledge. More Blue Punch machines

Faicon Dexter & Weiser Master

No dialing, turning, fumbling or guessing.

have been sold to and used by more lock manufacturers than all other punch machines combined.

#INJIG-MORT

5 minutes!

ase. The



714/633-0681 • Fax 714/633-0470 • www.pro-lok.com See Us @ ALOA Show Booth #518

Circle 266 on Rapid Reply



The new Kaba E-Plex 5000 improves security for the Santa Cruz Harbor while simplifying access control management.

alfway between the city of San Francisco and Monterey lies the Santa Cruz Harbor, a little piece of paradise carved out of beautiful Woods Lagoon. Home to more than 1,000 recreational sailing craft and a bustling commercial fishing complex, the harbor rests behind two popular beaches, Twin Lakes State Beach and Starlight Beach. Every year, hundreds of thousands of visitors enjoy the best of the ocean-side lifestyle, complete with spectacular Wednesday night sailboat races and Thursday night beach barbeques. And, during the summer salmon and tuna seasons, as many as 15,000 sport fishermen cast off from the harbor's public launch.

Maintaining security at this popular getaway, however, is no day at the beach. Challenges include corrosive salt air and rough winters that can easily destroy delicate equipment; a seasonal workforce that needs to access sensitive areas while on the job, but needs to be kept out during off-hours and the off-season. And, even here in paradise, there are budgets to consider. The harbor's permanent staff is small in number, and staff members only have so many hours in a day. Quick and easy retrofitting, plus fast and simple access authorization management are critical to keeping the operation efficient and cost-effective.



When Kaba Access Control needed to beta-test the durability of its new E-Plex 5000 electronic lock, Santa Cruz Harbor had the perfect spot. Forty yards from the ocean stands a maintenance shed. The front door faces the water. It's just the right place to punish any flaws in materials and engineering. Kaba representative Jim Daniels and local locksmith Scot Edelstein, owner of A&A Safe & Lock, hooked up with Tom Slagel, the Harbor's director of maintenance, to see just how well the E-Plex would perform in this most hostile environment.

With no wiring to run through the door, a simple, two-hole drilling template, super-easy "sandwich" fitting, and a field-reversible lever, installing the lock was a breeze. The real test, however, would be delivered by the elements. Could the E-Plex 5000 stand up to the corrosive effects of foggy summer mornings, winters, and constant exposure to salt air?

"After nine months of testing, the E-Plex 5000 looked brand new and operated flawlessly," said Kaba representative Daniels. Edelstein confirmed this assessment, "the performance was phenomenal and the satin chrome finish showed no wear." But the highest praise came from maintenance director Tom Slagel, "the test went so well that we ordered another one just as soon as they started production."

For Slagel, the durability of the E-Plex 5000 is just one of many important benefits. "From a security perspective, I get a complete audit trail. I know who entered the building and when they entered. If assets go missing, I get a complete list of suspects with a quick download to my PDA (handheld personal digital assistant)." According to Daniels, the ability to change authorizations at your desk provides even greater advantages, especially in a place like Santa Cruz. "It doesn't matter what the weather's like outside cold, rainy, or even one of those winter storms that comes in off of the ocean—you make all the changes from the comfort of your nice warm office, then upload them to each

lock in a matter of seconds. Plus, the locksmith can offer a whole new level of service to his customers. He can make all access authorization changes for all of his customers at his shop, then have one of his employees conduct the uploads as part of their daily rounds. The customer gets the ultimate in convenience, and the locksmith gets a new revenue stream. It's a real winwin situation."



In addition to an opportunity to offer maintenance contracts, locksmiths can also simplify their operations and reduce inventory. According to Edelstein, "because of the field reversible lever, I only have to keep half as many locks on hand. No matter if the next installation is in a right-hand or left-hand door, I've got it covered with just one lock."

"The E-Plex 5000 is the easiest, quickest way to get advanced

access control functions that I've ever seen," continues Daniels. "The Santa Cruz Harbor test really proved the exceptional durability of this lock. And the quick, simple installation, easy authorization management, and convenient access audits that we saw in Santa Cruz are being repeated everywhere. If you need advanced access control functions, but don't need all the complexity that's usually

associated with electronic systems, this is the ideal solution." Greater control with less work—for security managers, that's another little bit of paradise.

For more information on the Kaba E-Plex 5000 contact: Kaba Access Control, Phone: 800-849-8324 or 336-725-1331; Fax: 336-725-3269; E Mail: info@kws.kaba.com; Web: www.kaba-ilco.com.



From May 1st through December 31st 2005 HPC has been the world leader in producing lock picks since 1956. HPC was the first company to mass-produce lock picks making them available to locksmiths around the world. HPC picks are available in spring steel and stainless steel, with multiple handle options and case styles. In addition, HPC produces specialty picks, such as the Electropick", Pistolpick", and a wide selection of tubular picks. With so many options available, every locksmith can find their choice of pick from HPC. With every purchase of HPC products accumulate points to redeem for Free Stuff





The term rekeying doesn't mean much to most consumers because they don't understand the concept, so they can't relate to the expression. We, as locksmiths, have to explain the results to the customer even though it is not necessary for them to know the process. We must, therefore, thoroughly understand the method used to replace the pins or tumblers in a keyed lock.

If we are to understand the process, we have to understand the concept of keying a lock. It was Linus Yale that first invented the idea of a pin tumbler lock. His basic idea is still in use today, with some modifications. The concept of different length pins placed in chambers of the plug and top pins and springs in the bible of the cylinder are the basis for the system. When the pins are raised to the correct level by the insertion of a properly cut key, the plug will turn inside the body of the cylinder and the resulting action can be transferred to any connection made at the back of the plug. This principle applies to the flat tailpiece of the rim cylinder as well as the cam of the mortise cylinder and the various connecting mechanisms used by key-in-knob and lever locks.



1. Pins too high.



2. Pins too low.



3. Pins at shear line.



4. Keys and blanks.

Whether you are keying a lock to a new key or cutting a key to fit existing pins, the goal is the same—place the correct pins in each chamber to form a flat surface at the same height as the top of the plug. Too high and the pins will enter the bible, (see photograph 1), too low and the top pins will enter the plug, (see photograph 2). This point is called the sheer line, (see photograph 3).

Lets take a look at some of the tools you will need to be able to change the combination of a lock, or as it is called, rekeying the lock.

Key blanks and cut keys can be referred to as product or as tools, depending on whether you are selling the keys or using them as a tool to make a lock function. (see photograph 4). For our reference in this article I will call them a tool. You must have a proper assortment of key blanks to be able to do a variety of brands of locks. I suggest you begin with your distributors top 100 keyways and refine the blanks you carry as you get more experience in your area. Every area will be different, but you will need some of the basics no matter where you are located. These will include Schlage C and E, Weiser, Kwikset, Yale Y-1, Falcon, Arrow, Sargent, and

Corbin for example. I know some of the before mentioned brands will interchange, but it is far better to have the correct key when possible.

If you have a mobile rig with available power and you have a code cutting machine (more on these later) you will not have to have a supply of precut keys. If such is not the case, I suggest you cut a nice crosssection of the most common keyways in your area and carry them with you on your runs. The time saved will add up and time is money. Some locksmiths pre-package cut keys with the pins needed to rekey a lock. That may work, but I have never thought that to be a very time efficient way to work. I prefer to have the next tool I will mention as my storage system for the pins.

The tool I referred to is the pinning kit, (see photograph 5).



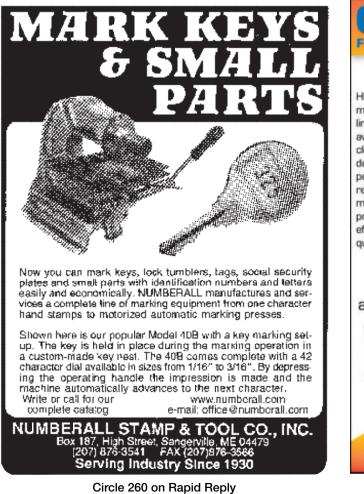
5. Universal pinning kit.

A few manufacturers provide these kits such as LAB, Zipf, and Specialty. Pin kits come in two basic sizes, .005 and .003. What that means is that the difference in length of one pin to the next is either .003 or .005 inches. LAB introduced the .003 system and others followed. The .003 pin system offers much greater flexibility over the .005 system. Either will work for most locks, but I prefer the .003 system because you will never be more than .001 inch from the original manufacturers specifications



6. Specific pinning kit.

with it while the .005 system can be as much as .002 off. You must remember that the difference between a smoothly working key and a poorly working key will sometimes be the thickness of a piece of paper. In cases like that, .001 can make quite a difference.





Circle 233 on Rapid Reply

July 2005 • 75

You may also invest in pinning kits for a particular brand of lock, (see photograph 6). These have the advantage of being exactly the manufacturers specs, but they are limited to being able to key only that one manufacturer's locks. They also are limited in that they offer limited compensate for miscut keys that you may be given to use as the base key for locks you will be rekeying. Some would say that you should cut a new base key to the original specs, but in the real world this is not always possible. The customer may already have several locks keyed to the miscut key and does not want to rekey all his locks. In that case, what can you do but key the locks to his key and compensate for the miscuts by use of pins that are not the lengths recommended by the manufacturer.

The next tool needed to rekey locks are followers or what some may call plug pushers, (see photograph 7). Several manufacturers make these, including HPC, LAB, PRO-LOK, KEEDEX, and many others. Which you chose to use is a personal decision, but you will need more than one diameter since you will be working with locks that use different diameter plugs. The three most commonly used sizes are .395, .495 and .550. Adjustable followers are available, but I find having the correct size for the job is preferable. I use the hollow followers manufactured by HPC because they are versatile, lightweight and can be stored by placing them over a small nail I have hammered for each size, (see photograph 8).

Followers are used to push the plug out of the cylinder and to trap the top pins in place until the plug is replaced. When you replace the plug, push the follower out with the plug and



7. Followers.



8. Followers on nails.



9. Tweezers.

do not pull the follower. This will assure you that the top pins and springs will stay in place instead of all over your counter and floor. One more tip, be sure to turn the plug when replacing it so the top pins will not drop into any unused chambers in the plug while installing it. This is not a problem if the plug is drilled to five pins and you have keyed it to the same with the key in place, but if the plug is a six or seven pin and you have used less than all the chambers, be careful.

Another helpful tool is a set of tweezers. I like the kind of tweezers that has a slot cut across the tip of the tweezers to hold pins in the upright position. Available from HPC and LAB, tweezers selection depends on user preference,



10. Using tweezers to remove master pins.



11. Plug holder.



12. Ring compression and ring spreader pliers.



13. Offset ring spreader.

(see photograph 9). Any tweezers will work but I believe having the tool that works best for you is the one you will use the most. I also use the tweezers to remove any master pins that may be in the lock from a previous keying, (see photograph 10). I believe it is important to check the top pins and springs to be sure the springs have not gotten weak or the pins are not sticking,



14. Cap removal tool.

and I use the tweezers for this process as well. I simply insert the tweezers in front of the follower and push it out as I trap the pins with the tweezers. I allow the pins to lift slightly, thereby being able to determine the functionality of each as I move toward the back of the cylinder. I usually do the front three chambers from the front of the lock and the last two or three from the back, because trying to keep too many pins in place while manipulating the next can be a recipe for gutting the lock. Checking the pins and



is. Stamping set.

springs this way will require some practice, but once you get the hang of it you will be able to do it very quickly.

Depending on the brand of locks you will be rekeying, you will need other tools like a plug holder, (see photograph 11), ring compression and ring spreading pliers, (see photograph 12) or even offset ring spreaders, (see photograph 13). Cap removal tools, (see photograph 14), stamping sets, (see photograph 15), and give away key rings, (see photograph 16) will also be



16. Give away rings.

needed. Some locks will require specialty tools, but you will have to get those as they are needed.

Next month I will go into the mechanics of keying specific brands of locks. I believe the secret to being accurate and fast in keying locks is to be careful and practice, practice, practice. The keying of a lock is a simple act, but it can make or break your reputation as a skilled locksmith. Do not overlook its importance.

TNL



July 2005 • 77



id you hear about the kidnapping?" Don asked as he came into the store one morning.

"What kidnapping?" I asked, looking up from my desk.

"The one at that little drive-in café out on the Del Rio highway, just west of town."

"You mean just outside Uvalde?"

Don nodded and unfolded the local paper to show me the headlines. "Three women were stopped there, at the drive-in, when a man pulled up behind them in an eighteen-wheeler, got out, walked over to their car and yanked open the door."

"You've got to be kidding."

"Nope"

"Boy howdy, that ought to teach people to lock their car doors," I said.

"According to the newspaper, he dragged the driver out of the car, and threw her over his shoulder. Then he carried her kicking and screaming to his rig and drove off with her."

"How awful! Have they found her yet?"

"As luck would have it, the woman's two female companions recognized the man as the woman's former boyfriend and called the police. They gave them a full report, and within an hour or so, they found the two of them at a rented house on Oak Street."

"Was the woman all right?"

"Well, it seems the report of kidnapping was a bit exaggerated. When the police broke in, they found the couple in a somewhat compromising entanglement."

"Are you serious?"

"Үер."

"So, what did they do to the guy?"

"Nothing. The woman refused to press charges."

"I thought kidnapping was a crime prosecuted by the state or federal government."

"That may be true, but the woman said her friends were obviously mistaken, and that there had been no kidnapping. She insisted she'd gone with him willingly."

"Kicking and screaming all the way?" I shook my head in disbelief. "I'll bet her friends felt foolish."

"No doubt," Don agreed. "But that's not all. Here. Read this while I go see if I can find one of our gold star "I'm so Smart" stickers. I think the dispatcher should get one, on this."

I took the paper and read the paragraph he'd indicated. According to the report, when the man's truck had been spotted outside his house, the patrolman called for back-up, and the dispatcher relayed the information to headquarters, where the Chief of Police was standing by.

"How many of our men are at the scene?" the chief asked.

"Only one," the dispatcher replied, "but he says he has the house surrounded!"

That must have been a really big policeman!

I sometimes use this little tale to impress my non-locksmith friends with the importance of locking all the doors of their car as soon as they enter their vehicle. It's a good habit to get into and might prevent their becoming a victim in any of various crime scenarios sweeping across the country. I also suggest they lock the doors any time they leave their vehicle, if only for a short time, as in shopping or even dashing in to pick up the cleaning.

Here's a situation you may never have considered. It, too, involved a not-locked vehicle and a very large man.

Bernice and I had planned to meet for coffee one morning, but as usual, she was running a bit late.

"Surprise!" she called to me as she entered the little neighborhood coffee shop. "*I finally got here.*" Sliding into the booth, she smiled as our waitress set a mug of coffee before her. Bernice reached for the cream and sugar and stirred them into the steaming brew as she continued talking.

"You know, I can't believe..."

"Whoa there!" I interrupted. "Where's your purse? You didn't lock it up in your car again, did you?"

"Absolutely not," Bernice replied. "Tve learned my lesson. Do you know what your locksmith charged me the last time?" I decided not to remind her how happy she'd been to get it opened, that day. She'd even said something about the cost being well worth it. How quickly they forget!

Bernice felt all around on the bench-seat beside her, looked on the floor, and came up emptyhanded. "Maybe I did leave it in the car," she said at last. "Oh, well. At least I won't need a locksmith, this time."

"How come?"

"Simple: I quit locking my car after that last little incident." She glanced over her shoulder toward the parking lot. "However, I just cashed a small check at the bank. I'd hate for some stickyfingered thief to help themselves to my hard-earned money. Maybe I'd better go get it. Be right back." Out the door she strode, but she came dashing back in, with no purse in sight.

"Didn't you find it?" I asked, thinking she looked awfully pale, all of a sudden.

"Somebody's sitting in my car," she whispered. "A great big burlylooking guy. He's sitting in the driver's seat, and he has my keys in his hand, trying to start my car."

"Well, what did you say to him?" I asked.

"Nothing. I was too scared. What should I do?"

"Come on." I grabbed her by the hand and led her back toward the parking lot, shouting over my shoulder for the waitress to call the police. As we approached her car, I had to agree with her hasty observations. The man was indeed big and burly. In fact, he was huge, and looked as if he hadn't shaved in a week or two. He was still trying to get her key to go into the ignition switch. The problem was, he was using the secondary key. "Excuse me, sir," I said politely, in an attempt to prevent antagonizing him. "But you seem to have gotten into the wrong car." I tried to open the driver's door, but he reached out the open window and knocked my hand aside.

"Get away from here. I got some place to go," he growled. I noticed his head was bobbing as if his neck was made of rubber, and

every time he blinked, his eyes sort of rolled back in his head. The man was obviously stoned. I tried to convince him to come inside with us and let me buy him a cup of coffee, maybe some breakfast, but he wasn't listening to me. He kept trying to force the wrong key into the ignition while mumbling about how he had someplace important to go.

It didn't take long for the police to arrive, three patrol cars complete with screaming sirens and flashing lights, but it took four men to pull the guy out of Bernice's car and get him into a squad car. Even then, they had trouble prying the keys from his hand.

Once things had settled down, we returned to our coffee, but Bernice couldn't stop trembling.

"I don't know what I would have done, if you hadn't been here," she said. I couldn't resist taking the opportunity to give my friend a mini-lecture on the merits of locking her doors.

"I thought locksmiths just told people things like that in hopes they'd lock their keys inside and would have to pay a locksmith to get the door open. You know, sort of like the bumper stickers I've seen that say, 'Support Your Local Locksmith—Lose a Key'."

<Sigh>! And for this we work 24/7/52, year after year after year?

TNL



Circle 286 on Rapid Reply



by Dale W. Libby, CMS

his is a story about changing the membrane keypad on a Cannon Gun Safe. This was a warranty job from LaGard. I will quote freely from the Keypad Retrofit directions and include my own comments and observations and sidebars.

LaGard called me and wanted me to retrofit a new keypad on the Cannon safe, and if that did not work, then drill the safe and replace the lock. I had never replaced just a keypad (with the safe locked) and thought it might be fast and easy. The first time never is, and I did learn a lot. It was not hard, but it took a lot longer than it should have.

LaGard sent me the retrofit directions along with a new keypad and dial ring (Type 1, the older type) and a new lock and the mounting hardware. The Type 2 LGBasic dial ring fits on screws just like the 3600 electronic combination locks. These are easy to remove and replace. Just push up and the dial keypad comes off. (Standard mounting pattern).

In *photograph* 1, we see the Executive Vault manufactured by Cannon Safe for COSTCO, a large discount chain of retail stores. There is a label on the inside of the door that relates the fact that the safe is made by cannon. The door itself features a large three spoke opening wheel and a center mounted electronic lock. The flat of the swing bolt is towards the opening edge of the door. Since I did not get to disassemble the door, there are no inside pictures of the lock and mechanism. The customer did not want a new lock body and did not want me to disassemble the door. There was all sorts of stuff attached to the inside of the door back panel and I did not want to disturb it.

There was another give away that the safe was made by Cannon. On the bottom of the golden keypad, there was a Cannon logo. This looks like a Civil War cannon embossed at the bottom of the keypad. On a regular keypad you would see the LaGard logo, which is a capitol L with a G resting on the bottom leg. This will be shown bet-

Continued on page 82



1. Executive Vault by Cannon for Costco.

Server Racks ANRP Historic FF



CompX eLock. Revolutionizing access control for cabinetry.

CompX eLock EL-2004-PRKP

There's nothing like the CompX eLock. Electronic access control for cabinetry, which means it can be used almost anywhere. In healthcare, academics, government, manufacturing — anywhere access control is required.

eLock Applications:

patient records

drug / supply cabinets

coolers / refrigerators

bio-hazard disposal

lockers

dorm room lock box

research lab

student records

key control boxes

tool cribs / carts

evidence rooms

equipment storage

cafeteria / food storage

015

have

many more!





Comp eLock

To receive your free shirt: Complete the form at **www.compxnet.com/aloashirt** detailing your actual eLock application, print it out and bring to the CompX booth #1323.

You'll also receive individual training on how to sell CompX eLocks.

Circle 358 on Rapid Reply

Pharmacy Cabinets Peach Valley Pharmacy Spartanburg, SC

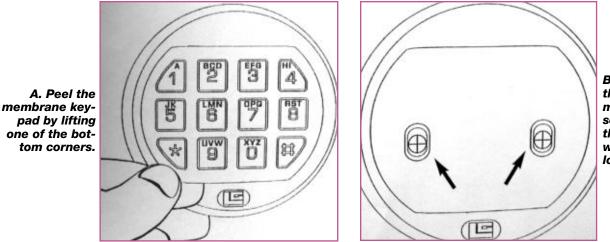
31

Utility Medicine Cabinets Greens Security Anaheim, CA

864.297.6655

eLock@compxnet.com www.compxnet.com

Copyright 2005 © CompX Security Products



B. Remove the two mounting screws and the keypad will come loose.

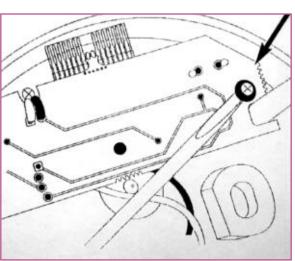
ter in the following illustrations. This one just had the cannon picture.

Let us start with the LGBasic keypad retrofit directions. I will put their words in quotes! "The following procedure has been developed to illustrate the correct method of replacing an existing mounted keypad. This procedure is to be performed with the safe door in the open position." Assuming the door is in the open position in the first place. "The battery cable may have been pinched during the initial installation, which

will cause a short to the keypad. If the battery connector has been pinched and the door is closed, an attempt should be made to connect a battery and open the door after the existing keypad has been removed. If a battery cannot be connected due to damage to the connector, then the change-out can be performed with the door closed."

Removal of Existing Keypad

1. "Disconnect the battery from the keypad." There is a plastic door at the bottom of the keypad that must be removed before you can do this. The newer keypads have a little Phillips screw that holds the cover in place. The older units have a cover that must be snapped out to remove the battery.



C. The circuit board is held in by one or two Tinnerman nuts.

2. "Peel up the membrane keypad to access the mounting screws by lifting one of the bottom corners of the membrane keypad," *(see illustration A)*.

3. "Peel up towards the top of the housing. This allows access to the Phillips head mounting screws in the two recessed holes."

4. "Remove the two mounting screws and the keypad housing will come loose from the door of the safe," *(see illustration B)*.

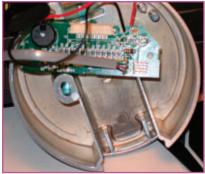
5. "There will be a thin gray cable connecting the keypad to the lock going through the hole in the door of the safe."

6. "Remove the circuit board from the keypad housing. This will allow the cable to be unplugged from the keypad. The circuit board is held in the housing by one or two Tinnerman nuts. (Thin flat one-way washers.) These can be removed by prying them off using a small flat bladed screwdriver," *(see illustration C)*.

Once you remove the Tinnerman nuts, which is not that hard, one of two things will happen. The little nut will break and cannot be reused, or, when prying, the nut will fly off the end of the post, never to be seen again. Either way, should this happen you must devise your own system of reattaching

the PC (Printed Circuit) board to the posts on the back of the keypad. I ended up using a glob of hot glue from a glue gun and it worked well. This was not wholly my idea, but I got it from an early LaGard keypad.

On the early Basic keypads, there was not a plug between the keypad and the wire to the lock. These early keypads had the end of the 4 strand wire soldered to the PC board itself. There was no easy way to work on these first made units. There is some sort of adaptor made for this, but I have not seen one myself. The keypads were hot glued to the posts and did not have Tinnerman nuts. This might be a giveaway. If it is hot glued, then the wire is soldered to the PC board, *(see*)



2. Early wired PC board by LaGard.

photograph 2). These were not meant to be easily replaced. I brought a glue gun with me.

7. "Once the Tinnerman nuts have been removed the circuit board can be removed from its two mounting posts by grasping the board at the top and bottom and pulling straight out." "Once the board is clear of the mounting posts, it can be turned over. The circuit board is held in the housing by one or two Tinnerman nuts."

This is the part that took me a lot of time to accomplish.





3. Modern clip type connector on newer PC board.

Nowhere does the directions mention a diabolical fact that the plug at the end of the wire is hot glued to the PC board. Yes, to keep the plug in tight, it is glued very well to the board. I had to use a heat gun (supplied by the customer) to first melt the glue, then a wire probe was used to remove the melted glue. Finally, after about 10 minutes, the plug was carefully pulled away from the circuit board. This was for the old board on the old keypad.

Yes, you guessed it. You have to go through the same heat,

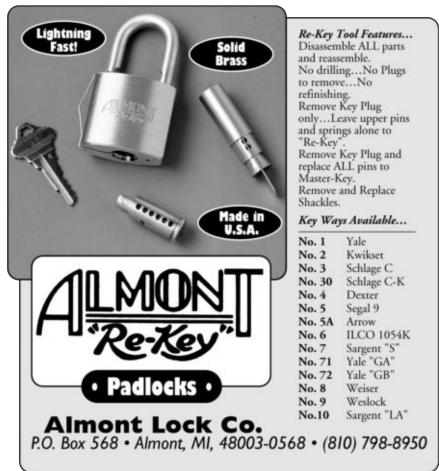
melt and scrape sequence on the new keypad to remove the wire. After a half hour of work, both the old and the new PC boards were de-wired and de-glued. You must remove all the glue from the new PC board or the old wire will not plug in easily. A lot of careful heating and scrapping is necessary. When done, you will have to glue the keyboard back to the mounting posts.

Installing the Replacement Keypad

1 & 2. See above for comments about removing the board and the wire and Tinnerman nuts.

3. "Install the circuit board back into the housing by pressing the board on the two mounting posts, paying close attention to the routing of the wires and making sure that the cable does not come unplugged from the circuit board," (see photograph 3).

4. "Carefully route the battery cable out of the housing through



the opening in the bottom of the entry housing. Make sure there are no trapped wires between the housing and the door where they could be pinched resulting in a short circuit."

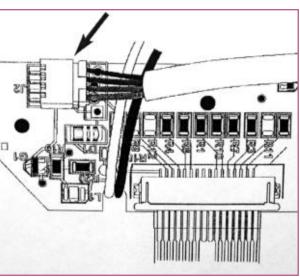
5. Position the housing over the two mounting holes in the door and install the two Phillips mounting screws.

6. "Connect a new 9 volt alkaline battery to the battery clip and test the operation of the system by entering the valid combination before closing the door."

This is where the door opened for me. The door had been locked to this time.

7. "After confirming the operation of the lock system, peel the backing from the membrane keypad and adhere the membrane keypad to the housing carefully, making sure the keypad is aligned in the housing recess."

Once the new keypad had been installed and the door opened, the customer was rather happy. I told him it was possible to put a second combination on the lock that did not use any of the numbers of the first combination. Directions for doing this are included with the new lock. The customer was happy, but I had spent over 90-minutes on a job I thought would only take 30-minutes. The hot gluing of the clips, although a good idea to keep the



D. The membrane keypad is attached by a ribbon connector.

connection tight was not meant to help when replacing the pad. You had to de-glue two clips, the old and new.

Todd Kern was asked to replace a large number of keypads on safes in the Cannon factory. Instead of taking the keypads off the door and removing the glued on clips, he decided just to replace the keypad from the outside of the door with the door closed. I am getting this second hand, but here is the general idea of how he did it. There might be some trick to do this. I will research it further.

The membrane keypad is attached to the PC Board by a ribbon connector that is used in computers, *(see illustration D)*. This is just a piece of electronic ribbon with metal connectors at the bottom. It is the simplest form of connection. It is pushed into the plastic plug. Apparently Todd figured out a way to peel up the membrane keypad and remove it from the keypad base without removing the entire keypad ring from the safe door. Or, if the keypad ring was removed, the PC board was not detached. This might make more sense. The connector can be removed by pulling on the keypad from the outside of the door.

The hard part (or the trick) is to slide the new membrane keypad wire connector into the plastic plug

connector on the PC board. When the PC board is attached, the plastic plug is at the top of the board, and since the membrane can only be attached in one way, the wire ribbon cable is selfindexing. I know, the membrane came unplugged while I was working on the safe. The first time I put it in wrong. Nothing happened when I tried the combination. I saw that it was backwards, so I reversed it and it worked just fine.

So, the moral of the story is that the membrane keypads can be removed and a new one attached. Take along a heat gun, a glue gun, and some sharp probes and you can do it the factory way. OPEN, replace the membrane keypads on LGBasic e-locks, and Prosper.



Circle 214 on Rapid Reply



by Bill Phillips

mpressioning is when you insert a key blank into a keyway in a way that leaves tumbler marks on the blank. You then file the marks, clean the blank, and reinsert the blank to make more marks. Then you file the new marks. You repeat the procedure until you no longer see marks and

you have a working key. With practice you should be able to impression most pin-tumbler locks within 5 to 10 minutes.

Choosing the Blank

To impression a lock, choosing the correct key blank is crucial. It needs to fit properly in the lock. If the blank is too tight, you won't be able to rock it enough to mark it. The

blank also needs to be long enough to lift all of the pins. If you use a 5-pin blank on a 6-pin cylinder, you won't be able to impression the lock. To choose the correct blank, first use a probe or pick to count the number of pins in the lock, don't assume that it is a 5-pin cylinder, be sure.

The material of the blank also needs to be soft enough to be marked by the pins, but not so soft as to break off while you're twisting or rocking the blank. Nickel-silver blanks are not recommended because they are too hard for impressioning. Aluminum blanks are also not recommended because although soft enough to mark well, they break too easily. Solid brass blanks are you best bet. Nickel-

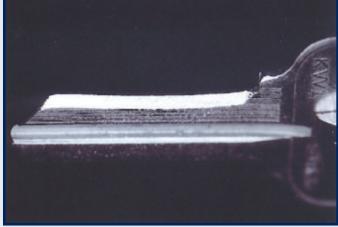


Illustration 1.

plated brass blanks are a good second choice, but it is recommended that the nickel plating be shaved from the blade pin surface.

Filing the blank

New key blanks have a hardened glazed surface that hinders impressioning, unless you prepare them. To prepare a key blank, shave the length of the blade along the blade that comes in contact with the tumblers. Shaving the blank at a 45-degree angle creating a knife-edge is a common practice, although not necessary or always recommended. If you choose a knife-edge type of key blank prep, do so without going too deep into the blank, *(see illustration 1)*. You want the blank's

> bitting edge to be sharp (a knife edge), without reducing the depth of the blank, because some pins may require a "0" cut to reach the shear line. When filing, always file forward, don't draw the file back across the blank. It leaves a cleaner surface to decipher pin marks.

> If you don't use the knife-edge preparation, just file the key blank surface to a mirror finish. The cleaner the surface or

plunge cuts, the greater your chances of success will be.

The use of a round or pippin file with a Swiss pattern No. 2, 3 or 4 cut is recommended. The finer the grade of file, the cleaner and more polished the surface prep will be. A courser file will shave the blank quicker, but will leave rougher striations on the blank. That will make the impression marks harder to see. A finer file will make the marks easy to see.



Product Overview

- Electronic No Hand Cranks! No Inserts!
- Repeatable Cutting Accuracy : +/- .0015"
- Add/Store custom setup Codes (10-User)
- Over 780 manufacturers depths and spacing codes provided (3 digit).
- Sealed ball-bearing cutter shaft assembly.
- Powerful 1/4 HP 2.4 Amp fan cooled motor
- Plunge or Contour cutting modes.
- Cutting Cycle 18 seconds (average).
- Interface to: Ledger, Black Hawk, Treskat
- Vice jaw effectively grips Auto, Residential and Commercial keys, including: BEST, SCHLAGE, SARGENT, FORD, etc.
- Warranty (Parts & Labor) 1 Year
- International models available.
- Tech Support: 24/7 (An Industry First!)

INDUSTRIAL MODEL 4500I

- Cutting cycle 10 seconds (average)
- User defined set-up codes: 50
- Stainless steel cutter shaft & guide rods
- Powder coated finish.
- Warranty: 5 years ; Free Uj grades



As featured in Locksmith Ledger & National Locksmith

Distributed By: BUSCH DISCOUNTKEYMACHINES.COM "THE KEY MACHINE SUPERSTORE" 800-332-8724/407-352-1532



Illustration 2.

Other Useful Equipment and Supplies

In addition to a file, you'll need a key holding device, such as an impressioning tool or a 4 or 5inch pair of Vice-Grip[®] locking pliers, *(see illustration 2)*. A magnifying glass or magnifying glasses can also be helpful. A head-wearing type lets you see the marks and file at the same time, *(see illustration 3)*. Although they aren't essential, you can use depth and space charts and a caliper to file marks more precisely, some even use hand clippers.

Popular Impressioning Technique

The pull method of impressioning is often used on pin tumbler locks. After preparing the blank, insert it fully in the keyway with locking pliers or an impressioning tool and turn clockwise. That will bind the bottom pins against the chamber walls. Maintain turning pressure and rock the blank up and down several times while slightly pulling the blank out, about ¹/₁₆th of an inch. The rocking and pulling will cause the pins to press into the blank leaving small marks, or "impressions." What happens in the lock when you turn and rock it is shown in *illustration 4*. Then turn the blank counterclockwise and rock the blank up and down several times while slightly pulling the blank out. (If the lock turns in only one direction, then twist the blank in that direction only.)

Remove the blank from the keyway and look for impression marks on the key blade. You may see one mark or several marks. File down about one depth at each mark. This is where the hand clipper can come in handy. You can use depth and space charts and a caliper to precisely file the blank as well, although most cut by feel. Remove enough material until the impression mark is gone and repeat the process.

Don't file where you don't see a mark. Some marks will be subtle, while others may be obvious impressions. You are looking for a change in the texture of the key blank surface. When light is reflected properly on an impression mark, the markings will look like small divots in the brass key blank material. If you can't see a mark (which is a common problem for some) you may need to view the blank at different angles to catch light in different ways. The trick is to reflect light off an impression mark to make it recognizable. More than half the skill needed to

Illustration 3.

impression a key is the ability to see and recognize an impression mark.

Never file more than one key depth for the lock you're working on and never file if you don't see a mark. Only file where you are sure there is a pin mark. If you don't have a caliper and depth and space charts, just file two or three strokes at a time and file forward. It's better to file too little than to file too much. Sometime dirt or debris may seem like a mark. If you're not sure if what you're seeing is an impression mark, use a clean cloth to wipe the blank.

After filing the marks, clean away excess metal on the bitting side of the blade by again filing it a little at a 45-degree angle. Just a couple of forward strokes on each prepared side will be enough. Don't decrease the depth of the blade.

Alternative Impressioning Method

Another method of impressioning is called "tapping." That's where you insert a prepared blank in the keyway and insert a steel rod in the bow. Use the rod for leverage to turn the bow clockwise, then while maintaining the pressure, use a small hammer to tap the top and bottom of the bow several times. Then twist the bow counter-clockwise. While

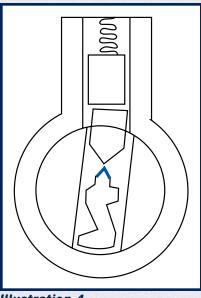


Illustration 4.

maintaining the turning pressure, again tap the top and bottom of the bow several times. The twisting is to bind the pins, and the tapping is to force the pins to mark the blank. File down at each mark you see. Clean the blank with one or two light strokes across the length of the blade. Repeat the procedure until you have a working key.

Problems with Impressioning

One common problem that happens during impressioning is the blank cracks or breaks off near the bow. That's more likely to happen if you use aluminum blanks or locking pliers that are too large. If your brass blanks are breaking off, you're turning and bumping too hard. You don't need to over turn or bump. It's the rocking that marks the blanks, not the turning.

If your blank cracks or breaks, duplicate it on a key machine or by hand. Then use the new blank to finish impressioning the lock.

Anything that makes it harder for the pins to mark the blank will hinder your impressioning attempts. Problems can include: missing or worn tumbler springs, worn tumblers, a long pin next to a short one, extremely close tolerances within the lock, oil, dirt or debris in the cylinder. There isn't much you can do about it if the lock is too old and worn, but if you have a hard time making marks, use a non-oil, wax free spray cleaner for electronic parts. Shoot a couple of squirts into the keyway and let it dry. That should clean the lock.

Impressioning Practice

No amount of reading will make you skilled at impressioning, because during impressioning you have to make a lot of judgment calls—which will get better only with experience. You have to judge how hard to twist and rock the blank, how hard to file, and how deep and how wide to make a cut based on the type of mark you see.

If you've never impressioned a lock, practice by using a lock with only two sets of pins. Prepare the blank, insert the blank into the keyway and twist the key clockwise. While maintaining the pressure, rock the blank up and down and pull it out slightly. Then twist the blank counter-clockwise, and while maintaining the pressure, rock it up and down and pull it out slightly. Remove the blank from the lock and observe the marks made by the pins. File at the most prominent mark only. Cut just one mark at a time, before cleaning the blank and reinserting it in the keyway to make new marks. Repeat the turning, rocking, pulling and filing procedure until you have a working key.

When you're able to impression a 2-pin lock add another pin and practice impressioning it. Continue adding pins until you can quickly impression a 5-pin cylinder.

Success at impressioning takes practice, patience and time. If you persevere however, it is a tremendous skill to posses and master.

Bill Phillips is the author of The Compete Book of Locks and Locksmithing, 6th Edition, and The Complete Book of Electronic Security.

Your New Source for KEY MACHINES

Börkey Rexa 2000+

Built for years of dependable service and high volume key cutting. Powerful 4-way jaws and easy lever operation produce perfect keys every time.



Börkey Rexa 3

The Rexa 3 is legendary for durability, longevity, and dependability. German-made quality. Fast, accurate. and reliable - a great machine.



Steel King

A great machine for all types of bit & barrel keys plus safe deposit, steel padlock keys, long, and double-bitted keys.



We have Börkey cylinder and furniture key blanks in stock. Call for catalogs.



2002 Mountaineer



by Tom Seroogy and Randy Mize



1. A cousin to Ford's Explorer, the 2002 Mercury Mountaineer is pretty typical for the new generation Ford/Lincoln/Mercury SUVs. With locks absent on the tailgate and passenger door, the locksmith is left servicing only the door and ignition lock.

Opening:



2. Opening the 2002 Mountaineer is easy and straight forward. Simply wedge the door open directly above the door handle and insert a long, right angle slide tool.

92 • Visit www.TheNationalLocksmith.com



3. Grasp the interior lock rod and slide to unlock the door.

Ignition Lock:



4. The 2002 Mountaineer is using the new knobless ignition, introduced in late 2001, and the 599179 **E-PATS** key introduced on the 2000 Sable.

Continued on page 94

Shift to new speed and control with Framon's redesigned Sidewinder key machine!

Long an industry favorite, the Sidewinder key machine is now faster and smoother than ever. We've added a spring-loaded carriage and handle for extra quickness and accuracy—the carriage now also features CNC-grade linear bearings that ride on hardened steel pins. Spring-loading on the vise table makes all operations exceptionally smooth and easy.

The Sidewinder can cut any side-milled, high-security automotive keys in use today—and you won't need to buy extra components. See why Framon gives you the greatest speed and control of any key machines on the market.

Call us today at 989-354-5623, or visit www.framon.com.



Framon Manufacturing Company, Inc. 909 Washington Ave. • Alpena, MI 49707 989-354-5623 • 989-354-4238fax • www.framon.com

PROUD SPONSOR OF LOCKMASTERS PUREAuto 2005



Circle 222 on Rapid Reply

Of course, we're still building every Sidewinder with all these key features:

- Two guides and four cutters included
- Compact and efficient design with rugged construction
- A pair of VW/Audi vises for easy interchange as needed, included at time of purchase
- A free demonstration video
- Full one-year parts, labor, and freight warranty*

*Cutters are not included in warranty coverage.



5. Originally, this ignition lock was introduced as the STRATTEC 706229 and included a sidebar. In September/October 2002, this design was changed to a non-sidebar version of the same lock, STRATTEC 707592.

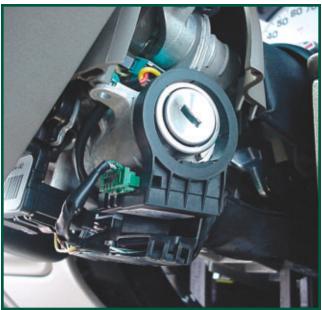


6. Removing this lock is a little more difficult than the locks used in previous year models. Gone is an access hole in the lower shroud, allowing access to the lock's retainer button. As such, it is necessary to first remove the lower shroud on this column to gain access to the lock's retainer. Use a standard Phillips head screwdriver to remove the lower shroud's mounting screws.

94 • Visit www.TheNationalLocksmith.com



7. Remove the lower shroud and move aside the large rubber grommet or bezel surrounding the lock and the shift lever.



8. With the shroud removed, the transceiver ring and accompanying harness assembly are fully visible. Not visible, however, is the lock's retaining button. Again, unlike previous years, the retainer is hidden beneath the transceiver unit, which must be removed before gaining access to the lock retainer.



9. Begin removing the transceiver ring by first removing the three bolts that hold the wiring harness to the column.



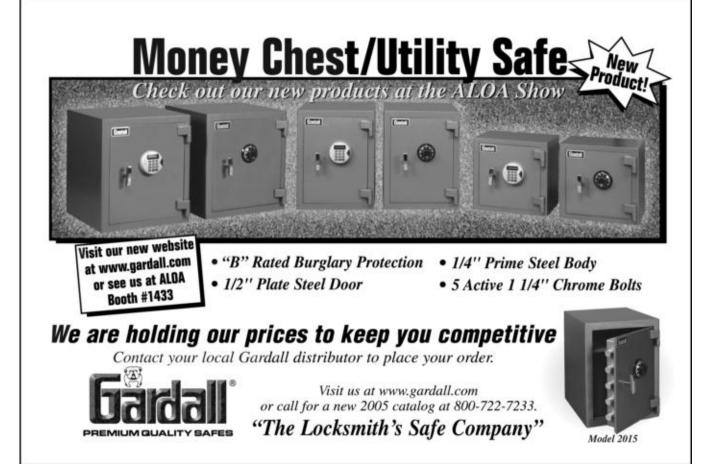
10. Three bolts hold this harness in place. Be careful to locate and remove all of the bolts holding the harness assembly to the column.



11. Remove the final bolt holding the harness to the column.



12. Using a small screwdriver, gently depress the locking tab of the transceiver connector.





13. Separate the connector.



14. With the connector separated, locate and remove the one bolt fastening the transceiver ring to the column.



15. Finally, remove the transceiver ring from around the lock housing and lock.
96 • Visit www.TheNationalLocksmith.com



16. With the transceiver ring removed, the lock's retainer can be depressed for lock removal. Insert a key, drill or pick the lock to the ON or RUN position and depress the retainer.



17. Remove the lock from the lock housing. With the lock removed it becomes evident that the lock's retainer is made of nothing more than plastic and can be depressed at any time.



18. During removal, some caution must be taken as the retainer can easily become damaged.



19. Needless to say, this retainer is simply a secondary retainer, holding the lock in place when the key is in the ON and START positions. To secure the lock in the housing, the snap ring at the back of the lock keys into the lock housing when the lock is in the OFF position.

Door Lock:



20. The door lock of the Mountaineer appears to part of the handle. However, handle removal is not required for removing and servicing the lock.



21. Begin door lock removal by first tearing down the door panel.



22. Three screws can be found along the bottom of the panel. Use a small socket to remove the screws.



23. Using a trim and panel tool to separate the trim.



24. Gently pry the handle trim from the door.



Circle 274 on Rapid Reply



25. Next, grasp the top of the window switch panel on the armrest and lift.



26. Be careful to release the small retaining tab that holds the panel in place.



27. Turn the panel upside down to view the various connectors.



28. Disconnect the connectors and set the panel aside.98 • Visit www.TheNationalLocksmith.com



29. With the panel removed, a small bolt is visible. Use a socket to remove the bolt.



30. The door panel is now ready for removing. Grasp the panel and lift straight up.



31. Large hooks on the panel hold it to the door. To avoid permanently damaging the panel, DO NOT try to pry the panel off of the door.

Continued on page 100

Biometric security. As individual as you are.





www.sargentandgreenleaf.com www.stanleysecuritysolutions.com

Retrofit Your Safe Locks With Flexible Fingerprint Security.

The new S&G[®] Biometric Keypad not only offers an entirely new level of security and convenience, it's designed to provide a fast, easy retrofit for the most popular S&G[®] electronic safe locks. Now, you can take advantage of our 21st century fingerprint security with the ease and economy of a simple keypad upgrade.

Its flexible fingerprint technology lets you choose to operate your locks by fingerprint or PIN code alone. For added security, you may also require both a fingerprint and PIN code. The backlit LCD makes programming and operation a snap.

High security. Maximum convenience. Learn more about the S&G Biometric Keypad at www.sargentandgreenleaf.com/bio.pdf

Continued from page 98



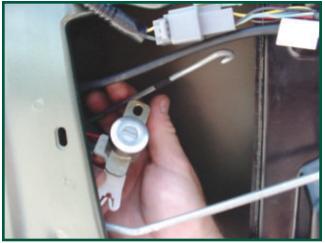
32. Once the panel has been separated from the door, disconnect the various connectors attached to the trim panel.



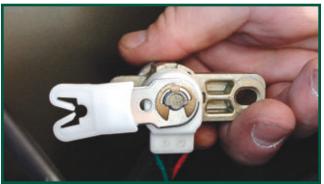
33. A vapor or environment barrier covers the inside of the door. To give us open access to the lock, carefully peel back the edge of the barrier, making sure not to rip or tear it.



34. To complete lock removal, use a 12mm socket to remove the nut holding the lock in place.
100 • Visit www.TheNationalLocksmith.com



35. The lock is now free to be removed.



36. Slide the lock up and off of the lock rod to finish lock removal.



37. Viewing the lock from the bottom, all the lock's tumblers can be seen.



38. As stated earlier, the lock is not actually a part of the handle. Instead the lock is used to hold the handle to the outside of the door.

Programming:

The 2002 Mountaineer is using the PATS II programming procedures for duplicating and programming new keys. When programming use the PCM module or protocol.

Car Specs:

Key Blanks STRATTEC: 599179 Locks Ignition: STRATTEC - 707592 Door: STRATTEC - 706231 Service Kits STRATTEC: 703373 BWD: SK5011

Code Specifications Code Series: 0001X-1706X

HPC:

Code Card – CX101 Cutter: CW1011

Stop -

A-1

Pack-A-Punch: Kit: PAK-F3 Punch: 90T

Curtis:

Cam: FORD-5

Carriage: FORD-5

Framon:

D 2004 STI

First Cut: .405

Space Block: #3

Stop: Place spacing clip on left side of vise and slide key in from right.

Highly Visible Widely Received



Our Exit Stopper[®] can help prevent unwanted exits and entries at any given time. Can be set to your specifications as either an alarm or annunciator with a variety of exit modes. With all the features the Exit Stopper has to offer, you'll find a solution to help protect your emergency exit doors!

See our complete line of products. Call toll-free or visit our website

800-888-4STI www.sti-usa.com

"We protect the things that protect you,"

Safety Technology International, Inc. 2306 Airport Rd., Waterford, MI 48327 Phone: 248-673-9898 • Fax: 248-673-1246

Spacing & Depth					
No.	Space	Framon Spacing	Depth		
1.	.845	.405	.354		
2.	.753	.497	.329		
3.	.661	.589	.304		
4.	.569	.681	.279		
5.	.477	.774	.254		
6.	.385	.866			
7.	.293	.958			
8.	.201	1.060			

Tumbler Positions								
Position	1	2	3	4	5	6	7	8
Ignition		Х	Х	X	X	X	X	X
Door	Х	Х	Х	Х	Х	Х		

For more information on servicing the Mercury Mountaineer, STRATTEC service parts or transponder equipment and supplies, contact Tom Seroogy or Randy Mize at Lockmasters Inc., (800) 654-0637 x342.



When durability, quality, performance, and substantial cost savings are desired, choose RETROLOCK RETROFIT TRIMS for excellence in manufacture and through bolt construction to rejuvenate all major brand mortise locks and existing door openings.



Circle 267 on Rapid Reply

Prizes Awarded From These Companies Every Month!





AAble Locksmiths Web: www.aablelocksmiths.com



Web: www.abuslock.com

Security Products

Web: www.cclsecurity.com

The DETERMINATOR™



Phone: (800) 561-0443



Web: www.hingedoctor.com



CTURING, INC.

Web: www.majormfg.com





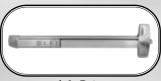


AR-L

Silca Bravo Duplicator



SDC Magnetic Lock, Keypad and Exit Switch



6th Prize **Detex Advantex**

How To Enter:







7th Prize Arrow 400 Series Alarmed Exit Device & S-75 Mounting Plate Kit for Narrow Stile Aluminum Doors



Z

2nd Prize Kaba Access Control E-Plex E-5031



5th Prize LaGard "SmartLinc"



8th Prize \$500 in ASP Auto Locks

Send in your tips, and win!

Send a tip on how to do any aspect of locksmithing. Certainly, you have a favorite way of doing something that you would like to share with other locksmiths. Write your tip down and send it to:

Jake Jakubuwski, Technitips Editor, The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107–1861

Or send your tips via E-mail to: Natllock@aol.com

Rules & Regulations: Each tip submitted must include your full name, street address (no P.O. Box numbers), city, state, zip code, phone number, fax number and e-mail address When sending tips via e-mail make sure to include complete address and phone.

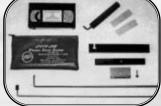
Every Tip Published Wins: If your tip is published you will win one of the monthly prizes listed. At the end of the year, we choose winners from all the monthly tips published, that will be awarded one of the fabulous year end prizes. All you have to do to win is enter.

Prizes are arranged according to suggested retail price value.

102 • Visit www.TheNationalLocksmith.com



9th Prize \$500 in Strattec Auto Products



10th Prize Tech-Train "Jiffy Jack"



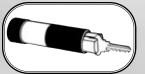
Sargent & Greenleaf 6120 Electronic Safe Lock



12th Prize High Tech Tools 2004 Pro Set



15th Prize Sieveking Products Squeeze Play



18th Prize Framon Impressioning Handle



13th Prize

Major Manufacturing's

HÍT-111 Drill Guide

16th Prize A-1 Security Manufacturing Installation Jig



19th Prize Gator Tool Multi-Purpose Facecap Tool





14th Prize Baxter #90 10-Cut GM Try Out Key Set



Keedex Sampler



20th Prize Peterson Picks, by Peterson Manufacturing

Tips Start Next Page



Web: www.wedgeco.com



E-MAIL YOUR TIPS AND WIN!

Natllock@aol.com

Foley Belsaw Belt Tip

Tired of breaking the belts on the Foley Belsaw machine?

Install the HPC 1200 machines belt and it will last forever. This belt will fit nicely into the pulley groove and the only thing that you will need to do is move the mounting bracket for the motor.

The part number for the HPC belt is CM-1083MA.

Terry Bradshaw Florida

(Editor's Note: Terry thanks for the tip. However, if you will have to move the motor bracket I would imagine that almost any small motor belt would work. On my "Mini" from IIco, I routinely use Hoover vacuum cleaner belts).

Mail Order Key Trick

I do a lot of mail order VW/Audi high security where the customer has only a single key. We try to get a photo and read the photo, but if that doesn't work, we get them to make an imprint of one side of the key in modeling clay, then send that to us. If we can read it and code cut, we do that.

We sometimes, however, use their clay imprint as a mold and fill with casting resin. That gives us an exact plastic copy of their key, which we simply duplicate. It's sometimes easier than using depth keys to generate a new key.

> Steve Sandlin Texas

BMW Wafer Snafu

I worked on a 1999 BMW door lock, which was a 2-track internal lock. A couple things came up that I thought were interesting.

A Few Words From Jake...

This, y'all just gotta read! Even if it is a reprint!

Aren't computers amazing? It seems like it was only a very short time ago that I gave up using a word processor and very reluctantly started using a computer. Now, I can't envision writing and communicating, and ordering merchandise and paying bills *without* my computer! Of course, the key to being successful doing those things is to provide the computer the right information. Remember the old saying: *"Garbage in, garbage out."*



by Jake Jakubuwski

I have more information at my fingertips then ever before. And, I can communicate with locksmiths and friends around the globe, in real-time, in a heartbeat! I can send an email to Australia, or South Africa, or Hoboken, NJ at the touch of a button!

And, folks now send me tips, tricks and stuff over the Internet and via email in a matter of seconds rather than depending on snail mail which can take days, and sometimes weeks.

Now, I'm faced with a new set of problems.

Too many folks are falling into the habit of zipping something to me via email and fail to give me important information that I need. Like their "real" names, physical addresses, telephone numbers, zip codes and even their business name! Instead I get things like Donslocks, Lockenup, LOCKDOC and Keymania. Great screen names, but they don't tell me who the person is, how to contact them or where to send the prizes if they don't give me a physical address!

Back in the days of purely snail mail, folks would sometimes forget to put a return address on an envelope or leave out a last name, or even forget to "sign" their letter altogether. With the advent of email, the problem is even worse!

I know, if I look at the "Sender" slot on the email, all I have to do is reply and request the information I need and the tips originator will send it right back, right? Wrong! Frequently, I or someone at TNL tries to contact these folks and their email address is defective, changed, undeliverable or whatever. Then we have to try to backtrack and spend time on the phone, or going through subscription lists or calling information trying to find out who the tip belongs to.

Or, we can print the tip and sign it with a screen name and then get a call (or and email) from the original tipster telling us someone "plagiarized" their tip! Or, a prize gets sent to the wrong person, or there are other problems.

For the last eleven years, I've devoted a lot of column inches to literally "begging" *tipsters to make sure they include their full name, their business name, their physical address and a phone number when they send a tip in.* Most tipsters do just that and we've eliminated a lot of problems. Now, we're getting a lot more tips, especially via email where that information is not complete. In fact it is often non-existent!

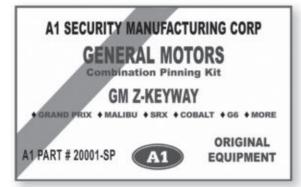
So here's the New Deal:

We are going to continue offering great monthly prizes and fantastic year-end prizes (prizes that have an aggregate value in the tens of thousands of dollars a year) and keep publishing the best Technitip column in the industry. But there's going to be a new rule. If your tip—however you send it to us—does not contain the information we need to make all of this work, the tip WILL NOT get printed! Or, if it is printed; there will be no prize sent since we don't have an address to send the prize to!

We will continue to do the editing, the "dressing up", fixing the graphics and trying to make the tip more clearly appealing—but you are going to have to give us the information we need! Please help us; help you to get the prizes you deserve for your efforts to make this column the most popular column in the magazine!

See y'all next month!

EXCLUSIVE AUTOMOTIVE PINNING KITS



A1's combination kit includes original equipment:

- GM-approved wafers and springs
- Retainer springs for side bar ignitions (SRX and Minivans)

Important Technical Note — GM Minivans

Due to a change in GM specifications, these wafers and springs are specified for GM minivans produced only during January – March 2005.

NEW TRANSPONDERS

SUB-120 Subaru Transponder

2005 Models: Outback 2.5 X, Outback 3.0 R, Legacy 2.5 GT, WRX STi



MALIBU



Order A1 Part Number

20001-SP and receive

*FREE *

\$50 IN IGNITIONS!

GRAND PRIX



Offer good through August 15, 2005





GMX-381 Pontiac Original

PK3+ Transponder Pontiac G6 2005 Models



CHY-250 Chrysler Transponder 2004 – 2005 Models Replacement key for original integrated key



VISIT WWW.DEMANDA1.COM OR CALL US TOLL-FREE 1.877.725.2121 FOR TECHNICAL INFO

Circle 202 on Rapid Reply

Continued from page 104

Attached is a picture of the



Illustration 1.

I found a rekey kit from ASP, which is part number A-13-105. I ordered the kit and took the lock apart. When I did this I found that the wafers I removed were different than what came in the new rekey kit. I contacted ASP in Washington and explained what I found. They advised me that you actually have to use 2 kits to rekey the new BMW locks; indicating that I would also need a VW A-31-306.

I had that kit and it didn't have the same type of wafers I encountered in the locks on this car. I called ASP back and we conferred with BMW tech support who advised that I might have to cut (or modify) the wafers or file them to work.

Attached is a picture of the different wafers that came out of the lock. I rekeyed the lock after about 3 hours and everything was great.... Or so I thought.

The next week I got another lock of the identical year and model BMW and even the same color from a different customer (yes it was a different car). As I began to remove like normal I got to the wafers and found another wafer style (again it's in the picture), so basically I had to use some of the wafers out of the lock to rekey it. original wafers and the ones I had to use to rekey the customer's key, (see illustration 1). Notice where the notches are on the wafers. they come in from both sides of the wafer. The groove at the top is to prevent the flip picks from working on the locks. They also

have an inner cylinder shell that will move if the wrong key is inserted. This is to prevent forcing the lock over with a screwdriver or other tool.

After all is said and done this is the rundown for 1999+ BMW lock rekeying. You will need two rekey kits and *all factory wafers that came out of the lock*. I am going to make a special kit of just the original lock wafers so I have them in stock. I am writing this due to the fact that between the two locks I have spent almost 8 hours to rekey them and this will save a lot of time and headaches.

> William Botek Oregon

A Double Header Hole Saw Trick

The issue is you want to install a new deadbolt or lock requiring a $2^{3}/8$ " hole, but you are replacing a $1^{1}/2$ " Schlage. Of course, you're worried about centering the hole and maintaining proper backset.

An easy solution is to take a piece of plywood $\frac{1}{2}$ " to $\frac{3}{4}$ " thick and cut a 2 $\frac{3}{8}$ " slug out of it. Put that in a vise or clamp and with a 1 $\frac{1}{2}$ " hole saw, cut a groove in it about the depth of the teeth of the hole saw. Then put the 2 $\frac{3}{8}$ " plug back in the 2 $\frac{3}{8}$ " hole saw with the groove





Illustration 3.

up. Take a $1 \frac{1}{2}$ " hole saw and put it teeth down in the groove inside the larger hole saw. Remove the pilot bit from the arbor if you have not already. Use a 3" $\frac{1}{4}-20$ carriage bolt with a $\frac{1}{4}$ washer driven on it and grind about $\frac{3}{8}$ " flat at the bottom. Use this in place of the pilot bit to hold the smaller hole saw in place. The plywood acts as a shim to put the smaller hole saw out to be your new larger pilot (*see illustration* 2 and 3).

I have used this with a 3 ¹/2" hole saw with a 2 ³/8" pilot to center a crossbore and cut out a latch guard for a new Grade 2 lever handle lockset with a larger rose. It did mark the door a bit but paint works wonders. It was on an old door at the back of a warehouse, not recommended for a storefront or decorative application. Saved time, money, and satisfied the customer.

> David E. Snyder E-mail

E-MAIL YOUR TIPS AND WIN!

Natllock@aol.com

Cap Replacement

It is relatively easy to slide spring covers off of a locks cylinder. Putting them back on so they stay can be frustrating.

I have found a really fast and easy way to solve the problem. I take the spring cover and put it horizontally in a small vise and divide it in half lengthwise. Then with a small hammer tap down the spring cover to form a "V " shape like a pup tent.

I put the slide back on top of cylinder and tap it down so it spreads out and is flat. Then restake it down in the usual way. I have used ViseGrips[®] many times when a vise was not available.

> Richard Oliva Ohio

Almont Re-Master Keying Trick

The other day I had to re-key 25 Almont padlocks that were master keyed. I had to re-key them to a new master key and change key. I really was not looking forward to that.

I was looking for an easier way to do the job when I picked up my KEEDEX master pin follower. I noticed it had a groove in the same place as the tool to load your top pins. I cut off the end of the follower so it would bottom out at the bottom of the padlock's cylinder chamber.

Then I cut a groove in the follower the same height as the pin inside the padlock that's about .620 from the end of the follower.



Bullseye SD Locks 2033 Parasol Dr. Lexington, KY 40513 859-224-4898 / Fax: 859-224-1199

Circle 215 on Rapid Reply

Part NumberB175-GMK

Then I pulled the plug out in the usual way, and put the plug follower into the padlock and pulled out the reloading wire turned the plug follower over—all the master pins fell out and the top pins stayed in place.

I rotated the plug follower to place the "flat" to the "bottom" of the keyway, reinserted the reloading wire, and re-keyed those padlocks. This saved me a lot of time and frustration!

> Glen Culver California

10-Cut Ford Trick

Make a door key to a Ford ten cut the easy way. No lock disassembly required! No impressioning!

With the lock removed from the door, simply look down the cavity at the rear of the lock where the tumblers protrude into the lock housing. Insert a blank key.

The last tumbler you know is the 6th cut on the key. Cut the sixth space on the key



2345 N. Central Avenue Brownsville, TX 78521 Phone: 965-838-2480 FAX 956-838-1796

108 • Visit www.TheNationalLocksmith.com

Circle 249 on Rapid Reply

(Use a Pak-A-Punch, code machine, etc.). You can tell the blank is properly cut when it's level with the cylinder (at the shear line), proceed to the 5^{th} , 4^{th} , 3^{rd} , 2^{nd} , 1^{st} .

No fuss, no muss! Now that you know what the 5th and 6th cuts are, you can use your favorite Ford try-out system to find the ignition cuts. I find this method easier than impressioning the door lock. Or, there are a number of progression charts available for the old 10-cut ignitions.

> Tom Richardson Washington

Inoperative Ford 10-cut Tip

Jake I would like to submit the following tip for removing a Ford 10 cut ignition that will not turn.

In most cases this is caused by the key buzzer being broken off and pushed into the end of the keyway as customer attempts to put the key in. If this is the cause the ignition can usually be quickly and easily removed by taking the customers key and duplicating it onto one side only of a new blank.

However, as you tip gauge the blank you are duplicating the cuts onto, place a nickel between the tip of the key and the gauge therefore causing the cuts to be closer to the tip of the key. This will allow room for the broken key buzzer part in the end of the keyway and still allow the key to go in far enough to operate the lock.

Make sure to duplicate only one side of the key this way as the key will then be much



stronger. However, remember that on most Ford 10-cut ignitions the cuts should be facing up.(If unsure use a pick in the keyway to determine wafer side) With the lock lubricated this will usually allow the cylinder to turn for a very easy removal.

I have used this for quite some time and it is much faster than cutting off a key you have already duplicated plus you will already have the correct (actual) taper on the tip for easy insertion.

> Clarence "Sonny" White Illinois

GM 10-cut Ignition Picking Trick

When picking the newer GM 10-cut door locks; I find that the cylinder will often turn to the locked position easier than to the unlocked position to open the car or pickup. I then had the problem of trying to quickly flip the key to the unlocked position.

An easy solution to this problem was to attach the key to a standard key ring and slip my finger into the key ring and flip the lock open. This gives you the additional turning speed you need to flip the car open.

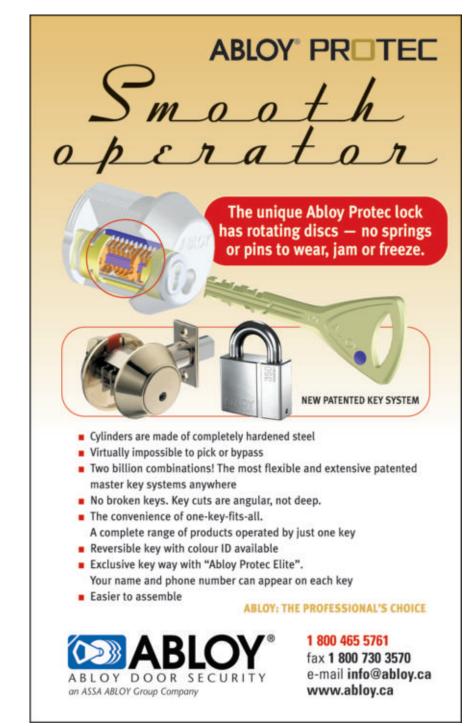
Try this and you will be surprised how much it will assist you in "flipping" the cylinder to the unlocked position. I also use this "trick" on Chrysler locks or foreign auto locks when picking is possible.

> Dave Lueras Wyoming

Tight Weather-Stripping/Air Wedge Tip

On a lot of cars the weatherstripping is so tight it is hard to get a wedge between the weather-stripping and the window. In such instances, I have found it especially hard to do using an air type wedge. What I have found to work beautifully is a piece of transparency film that goes in photocopiers. For those who are not familiar with transparency film, it is a thin, slick, sheet of plastic that is about the same size and thickness of a sheet of paper. I bought an 8.5" x 11" sheet at Office Depot for 79 cents and cut it in half to get 2-pieces 5.5" x 8.5". I slide one piece of film between the window and the weather-stripping about 2 inches down into the door. Then slide the wedge down in between the film and the window. The film acts like a shim and allows the wedge to slide easily down into the door without tearing up the weather-stripping.

Doing the same procedure from the inside of the car, It is also helpful in getting an



MCOT tool back into the door panel to remove the tool from the door. You can turn the film any way you need it depending on how wide your wedge is. I have used the same piece of film on about 30 cars and it still is in perfect condition.

> David Green Mississippi

Interchangeable Core EZ Control Key Cut Finder

Here is a quick method to determine the cuts for a control key for a properly pinned A-2 system. Instead of measuring the driver pin length and converting the pin length to a pin size (4-13) and then subtracting the pin size from 23 and then subtracting 10 or subtracting the pin size from 13 to determine the cut for the control key. Simply measure the driver pin and use the following chart to determine the cuts for your control key.

Pin Length Control Cuts
90509
80628
70757
60876
51005
41124
31253
21372
11501
01620

Don't you wish programming your VCR/DVR was this easy?

Steve Bright North Carolina

S&G 8400 Detached Dial Ring

The three set screws that secure the tube spindle to the dial had loosened. I figured the security container (Mosler Class 5) would have to be drilled since the setscrews were facing the container drawer, thereby not providing room to reattach the dial to the tube spindle.

After giving the situation some thought, I placed small vise grips to the inner spindle and slowly turned the spindle tube until the inner spindle turned. I had located "0" with the dial ring opening index!

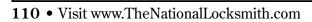
I turned the dial thumb-turn a quarter turn to the right to align the thumb-turn slot with the inner spindle and carefully inserted the dial on the tube spindle while centering the inner spindle and aligning "0" on the dial with the dial ring open index. After turning the dial thumb-turn to "0" I proceeded to dial the combo, turned the thumb turn at "0", turned the dial right to open! It worked!

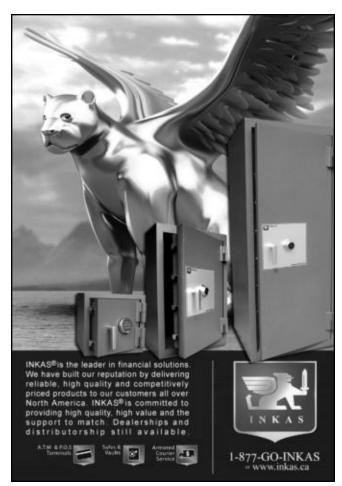
> Jack's Mobile Locksmith Service Florida





Call today for our FREE start-up kit 888-456-1888





Circle 284 on Rapid Reply

Introducing VA Code and DAP-key "

Q VA-Code V1.0 Ptr.: Server 1986			VA-Code Current
Dash Info VAG Number: 380920926 Dashboard id: KOMBI+WE Extra: WVWPD631 Extra: UVWPD631 Extra: Urgin Diagnostic Fault codes Output test Type	GFAHRSP VDO V01	Coding: 07235 WSC: 00028	Years Make/Model 01-04 Audi A4 (VDO TYPE ONLY 01-05 Audi A6 01-04 Audi Allroad Quattro 01-05 VW Golf 01.05 VW CTI
VBKX00NH	Close	3.15 [01-04 VW TDI
Read/Save EEP	ROM	Login	
Open/Write EEP	ROM	КМ	
		Start	Exit
WTN32_NT 1356 3809209	SEE_KOMET_WEGPAHRSP_ICO_VOL_WAWPO6383(1)	1.00	

TM



DAP-Kev

Car Dealers and Locksmiths agree that the Dual Access Plus Key is, "better than factory-original equipment." The three-button universal remote housing/key blade replacement for Lexus and Toyota Land Cruiser includes a reinforced injection molded shell with a stronger anchoring of the key blade.

The precision quality will impress enthusiasts and critics alike.

- Remote housing is made of ABS plastic
- Key blade is high quality nickel silver
- Black oxide SS fastener
- Lifetime Warranty
- Made in the USA

Distributed by Accredited Lock, Americanautolock.com, Intermountain Lock & Security Supply and Key Sales & Supply.

For more information call 800-860-KEYS

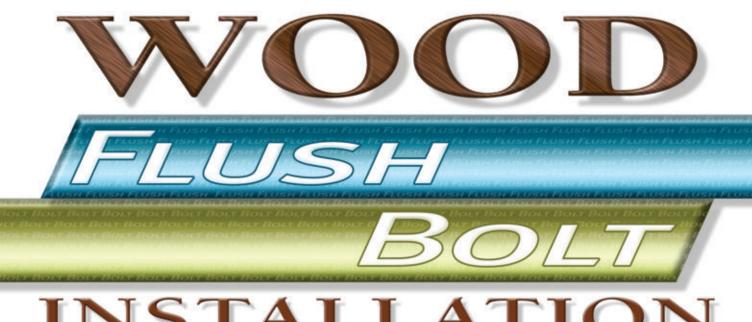
LANDCRUISER

LONG

SHORT

Patent

Pendina



Using the Major HIT-33 Router Template System to accomplish the task.



T For flush bolt installation, door must be removed from jamb. Secure in a door stand for ease of installation.



Using a plunge router equipped with a 5/8" outside template guide and a 1/2" diameter router bit route the mortise for the flush bolt body. Be sure to route in a clockwise direction, do not attempt to make this mortise with one pass. Adjust the router and make cuts of no more than 1/4" at a time.



Determine location of bolt and make a light pencil mark. Extend line across door with the use of a combination square. At the same time draw a light pencil line down the center of the door. These marks will be used to locate the HIT -33 base and template.



5 With the mortise completed, remove the HIT-33FB2 template and attach the faceplate template. Readjust the cutting depth for the faceplate thickness and route the faceplate area.

HIT-33FB4 for 1" x 6-3/4" faceplate. HIT-33FB6 for 1-1/4" x 6-3/4" faceplate.



Adjust the stops on the base to center on door and tighten screws. Attach the template to door using the double headed nails, located on the top and bottom of the guide or use two dry wall screws. Both methods will work. Install the HIT -33FB2 template (for the flush bolt body) to the base plate with two Phillips screws.



After all routing has been completed, remove template and using a sharp chisel, square the four corners.



Mission: Obtain locks that are easy to install, program & use.

The E-Plex's LectroBolt[™] mounting screw eliminates running wires to or through door.

The LectroBolt[™] is your secret weapon to eliminate complex wiring and the risk of pinching wires and cables that can result in costly callbacks. Simplex has set the standards for pushbutton locks for over 40 years, with designs that are simple and reliable. Now, E-Plex incorporates these same Simplex standards into a lock that also gives you the added security of electronic access control.

The Simplex and E-Plex 5000 are non-handed and easily install on wood or metal doors. Locks are quickly programmed with the lock's pushbuttons. The E-Plex can also be managed with optional Microsoft[®] Excel based software. With the Simplex and E-Plex Series, you can choose among this comprehensive line based on your needs.

- Single Code Mechanical
- Multiple Code Electronic with programmable features and audit capability
- Knobs or Levers
- Cylindrical, Mortise or Exit Device Trims
- Key-In-Lever or Interchangeable Cores
- Multiple Finishes



Circle 242 on Rapid Reply

Kaba Access Control www.kaba-ilco.com 1.800.849.8324

Continued from page 112



Attach the rod drill guide to the door using two dry wall screws. There are two shims inside the guide to adjust to door thickness. With both shims inside, the guide will center on a 1-3/4" thick door. One shim will allow centering on a 2" thick door, no shims will center a 2-1/4" thick door. Make sure guide is flat against door top and side.



10 Remove the HIT-33FB91 router template and square the mortise with a sharp chisel and install factory rod guide. The use of a self-centering drill will increase the accuracy. Part number for our self-centering drills: MCD series.

Router used in this installation was a Hitachi M12V. Plunge routers made by Porter Cable, Ryobi and others will also work. If you plan to do a lot of installing with a router, it pays to buy quality. Choose a router that has easy to reach controls.



Using a 1/2" diameter drill bit, drill to flush bolt pocket using HIT-33FB9 drill guide.

Part number for our 18" carbide tip drill bit: HIT-33DB1.



1 Drill and install faceplate screws and the flush bolt application is completed. Install flush bolt on opposite side of door using the same method.





Remove HIT-33FB9 drill guide and attach the HIT -33FB91 router guide using the same two screw holes left by the HIT-33FB9 drill guide. Route for the factory rod guide. Make sure router depth guide has been readjusted to route the thickness of the factory supplied rod guide only (about 5/64".)



13 If you currently use a Porter Cable model 691 "D" handle router, the addition of a Model 6931-type 2 plunge base will turn it into a dualpurpose tool. Use the model 691 for aluminum door and electric strike work and the plunge router base for wood door installations.

For more information contact: Major Manufacturing Inc., Phone: 714-772-5202; E-Mail: mail@majormfg.com; Web: www.majormfg.com. Circle 302 on Rapid Reply.



CENTRAL INTELLIGENCE AGENCY



YOUR TECHNICAL KNOWLEDGE IS OUR SECURITY

Technical Security Officers

CIA Technical Security Officers configure, deploy and maintain a variety of security systems, regularly working with US- and overseas-based Security Officers to coordinate programs. They also perform administrative duties, as well as working with and lifting heavy equipment. After a few years' experience, you may be asked to serve in an overseas CENTRA assignment.

Minimum requirements include a bachelor's degree in engineering or an associate's degree in electronics technology. In lieu of a degree, a certificate of completion for equivalent military, commercial or industry-recognized electronics school or training programs, or comprehensive work experience, may

be accepted. Candidates must be proficient in the field of electronics, or in an electromechanical environment. Knowledge of electronic and/or mechanical safe/lock servicing, alarms, CCTV, and experience working as a locksmith are ideal. Several years of service in

the corporate security field are also preferred. Overseas experience is desired but not required.

For additional information and to apply online, please visit: www.cia.gov and view under "CIA Careers" — "Engineers and Technology"-"Technical Security Officers."

All applicants must successfully complete a thorough medical and psychological exam, a polygraph interview and an extensive background investigation. US citizenship is required. EOE

THE WORK OF A NATION. THE CENTER OF INTELLIGENCE.

Circle 279 on Rapid Reply



A s you know, we have a web site at A www.TheNationalLocksmith.com. On the web site we have forums where locksmiths often get into discussions about technical aspects of the job. Once in a while, however, we get off onto tangents that turn out to be pretty amusing.

This article is one such tangent. Here are a bunch of locksmith's Pet Peeves. Remember, we consider most of these items as humorous, or a way to blow off steam. Not all of them talk about how to treat the customer professionally, but here's a behind the scenes peek at what some of your colleagues are thinking to themselves.

* * * * * * * * * * * * * * *

What are your pet peeves when it comes to customers, and/or work related topics?

Let me start-off with my personal Biggie.

Cheap People!

I'm not talking about someone who is being prudent with the little that they have (because supporting the Brady Bunch, isn't easy). I'm talking about, "El Cheapo Supremo!"

You know what (or who) I'm talking about. It's that pennypinching-miser-scrooge, who insists that they can get a key originated for their car for \$30.00! (thinking that by quoting that low price, you'll try to beat it).

It's the person who having agreeing on the price of the service, tries to haggle you for a lower price, after the work has been completed.

It's the ones that you see at garage sales. Who will see a really expensive item selling for .25 cents...(Twenty-Five Cents)...and want it for .15 cents!

Author: Lockprone

My biggest pet-peeve is people who call and ask, "What do you all charge to make keys?" Then you have to ask for what? Then the idiots say for my car. Then you have to say, ok, and that would be what kind of car? And they don't know!

Author: Joan Yarrington

My peeves: The customer who calls and asks, "How much to unlock a car?" What kind of car? "I think a Ford." What year? "95 or 96, I think." Is it your car?

The customer who calls and asks, " How long to get here?" Where's here? "Irving." Where in Irving?

Customer who says, "\$40"*#@* aren't you having some sort of sale today?"

Customer who says they have been waiting forever for another locksmith. Have you cancelled the other locksmith? "No." I tell them to cancel the other one, then I will come. But they must cancel the other one first.

Other locksmiths: Any locksmith who slams another locksmith in front of a customer. There are other ways to handle a job that was messed up by another smith than to put him or her down to a customer. In my experience, although the customer may agree with you, they don't appreciate it when you downgrade your competitor. The word may very well get back to the other locksmith and then you will have trouble.

Author: Woody Quiñones

- 1. Hardware store locks that are sold to the public. Part metal, part plastic.
- 2. Those who call expecting a discount because they think they are someone.
- 3. Distributors claiming my price is wholesale.
- 4. Home improvement centers selling locks for less than my wholesale price.
- 5. Jumbo shrimp.
- 6. The scale showing that I'm heavier than I believe.
- 7. Your phone system going down without you knowing about it or being able to transfer it to your cell phone.
- 8. Friends who ask you to drive 30 miles to their house to drill

NATIONAL AUTO LOCK SERVICE, INC.



JAPANESE 4-TRACK INTERNAL HIGH SECURITY 001-5000 & 40,000-50,000 COMPLETE CODE SERIES!

THESE CODE SERIES ARE FOUND ON LEXUS & TOYOTA MODELS WORLDWIDE.

REQUIRES WINDOWS[™] 2000 OR XP HOME OR XP PRO COMPUTER

REQUIRES USB SECURITY DEVICE TO RUN SOFTWARE - 1 DEVICE INCLUDED WITH PURCHASE

- COMING SOON - AN AFFORDABLE SOLUTION FOR VAG PIN CODE CRACK -

SALES LINE: 1-800-954-5454 OR INTERNET: WWW.LASERKEY.COM

Circle 285 on Rapid Reply

Continued from page 122

and install their deadbolt and they give you \$20 for your time.

- 9. Customer has you drive out to make keys for his vehicle only to find out he wanted you to duplicate the one he has.
- 10. Customer claims the key you made, three days earlier, won't go into the ignition. You drive out there insert key and the lock turns first time.
- 11. NSP's without their Corporate Credit Card handy.
- 12. Locksmiths who will not upgrade their skills.
- 13. Trade shows 3 hours away.
- 14. Hanging Chads.
- 15. Customers who think COD means 60-day billing. Should I continue?

Author: Ed Hamm

Don't you just love the person who calls everyone in the phone book, then calls you? We have a routine that we go through for lockouts. It goes like this:

- 1. Where are you?
- 2. What kind of car do you have?
- 3. Have you called anyone else?

I have actually had people say yes and then say, the first one here gets the job. My polite answer is thanks, but no thanks. If I'm in the mood and feel they have enough intelligence to understand, I tell them why I'm not interested.

Author: Collis Bosworth

Telemarketers!

I never buy from an unknown person cold calling. Never. I try to ask some simple questions like what database do you use to get my number? And please remove my name.

My partner had someone ask him if he could open their home for half price. He replied sure, I'll pick the lock half way.

Author: John's Locksmithing & Sharpening Service

Customers who look you up in the phone book, call and you answer, "John's Locksmithing." Then ask, "Are you a locksmith?"

Also upsetting was a customer who called one Sunday afternoon and thought 35.00 was too much to come out and make a new boat key. So much for being nice.

Author: Mark Ready

The customer who comes in to my store and says he has been all over town and no one can duplicate his key. I then ask if he has been to a locksmith store, the answer is always no. Will the public ever learn? $\star \star \star$

Author: Dean Sperlin

1. When contractors build new houses, expensive houses (\$500,000



Circle 285 on Rapid Reply

and up) and install cheap contractor locks. Or when Contractors install deadbolts and don't install the hardened steel plate with 3" screws to the studs and don't drill the factory mortised doorframe through to allow the bolt to fully extend. I later explain to the homeowner that without the plate and the bolt hole drilled out, the deadbolt is completely useless!

2. When people call me up after midnight and want to argue prices with me! This one I just can't believe! I had one lady call me up at 1:30AM, and scream at me, "One hundred dollars?" "We could rent a hotel room for that!" I told her that was fine, and she said, "Here I'll let you talk to my husband" I said, OK. The second her screaming voice was off the phone, I hung up and disconnected the phone. I wasn't going to be screamed at again at 1:30AM!

Author: George Henderson

People that want a discount for drilling open their safe because nothing of value is in it.

ネネネネネネネネネネ Author: Robert Blake

How about the guy who comes into your shop to have a key duplicated, only to return in an hour to tell you that the key you made doesn't work any better than the one he brought you in the first place.

Then there are the ones who call at 3:30AM to ask what your store hours are.

I had a guy tell me that he thought his key was weak because it had deep cuts in it, so he tells me when I copy it to make all the cuts higher. I explain that if I change his key it won't work in his lock anymore. His response? "You're not much of a locksmith are you?"

Some questions I hate to hear: "How come this is taking so long?" "Could I get it done cheaper somewhere else?" "Could I use your phone to call another locksmith and check their price?" "How about you do the work now and I'll send you a check when I get paid?" "Hey, can I buy one of those tools from you?"

Some comments I hate to hear: "Huh, I thought one key operated all the locks." "I thought you guys just stuck something in the lock and it pops open." "Man, you got a license to steal." "I've seen this on T.V. and that's not the way the guy did it." "That's not going to work."

☆☆☆☆☆☆☆☆☆☆ Author: Jim Storie

I guess my biggest pet peeve is getting call backs from customers that swear the locks you rekeyed last week just quit working. You ask them if they had any duplicates made anywhere and of course the answer is, "No I never get keys made anywhere but your place." You go out there and the first thing you see is Axxess or Ace on the key blank.



Circle 288 on Rapid Reply

Cars are the best replacement for horses...

KSP is your BEST replacement source for IC cores!

- Quality
- Price
- Delivery

That's what KSP is all about!

Ask your wholesaler about drop shipping



33 Hermon Street Worcester, MA 01610 Phone (508)798-3200 Fax (508)753-2183 www.iccore.com

Circle 246 on Rapid Reply

BUSINESS BRIEFS

Kaba Access Control

Rick Eisen has been appointed as Eastern **Regional Sales Manager** for Kaba Access Control products.

Eisen has been with the Kaba organization for over 10 years. During this period he has served as National Sales Manager for Kaba High Security Locks and **Central Regional Sales** Manager for Kaba Access Control. Most recently, Rick has served as Security Solutions Specialist with a focus on developing the Loss Prevention market.

Recognition Systems FingerKey Readers

The FingerKey DX series of biometric fingerprint readers have been investigated and passed the requirements contained in the **Underwriters** Laboratories' (UL)



Standard Access Control Systems, UL 294, as well as the requirements contained in the **Canadian** National Standard for Miscellaneous Signaling Equipment, CSA C22.2 No.205-M1983. The

readers are manufactured by Recognition Systems, the biometric component of Ingersoll Rand's (IR) Security & Safety.

The FingerKey DX fingerprint access control reader is a low-cost biometric alternative designed to secure smaller user populations. It includes a keypad and LCD display. Optional proximity reader, memory and Ethernet versions are also available. Verification takes less than two seconds. The user simply enters a PIN code or presents a proximity card, which calls up a template to scan. Then, the user places a finger on the FingerKev reader for verification of the template.

S&G Names Managers

Jeremy Brookes has been appointed east regional sales manager and Anthony Mayo has been appointed west regional sales manger for Sargent and Greenleaf. They are responsible for managing sales to S&G's network of distributors and OEMs in their



Jeremy Brookes

territories, and report to Ned Urschel, vice president of sales.



Mayo comes from Siemens and Johnson Contols. With 12 years of experience in the security electronics industry, Mavo has worked with convenience stores. Fortune 500 companies, the banking industry and the federal government. Mayo holds a Bachelor of Arts degree from the University of Southern California.

Yale Commercial Locks & Hardware Receives 2004 Achievement Award

Yale Commercial Locks & Hardware is the recipient of the 2004 Achievement Award given by the Tennessee Center for Performance Excellence (The Center) in its annual recognition program.

The award was presented at the 12th annual Awards Banquet on February 17, 2005. Receiving the award on behalf of Yale was Dick Krajewski, General Manager, and Wayne Furniss, Quality/Business Improvement Manager.

The Center, through its annual evaluation and assessment process, recognizes organizations that have achieved the highest standards of excellence in their operations and results. Yale was assessed in the categories of Leadership; Strategic Planning; Customer & Market Focus: Measurement, Analysis & Knowledge Management; Human **Resource Focus: Process** Management; and **Business Results.**

DORMA Acquires **Carolina Door** Controls, Inc.

DORMA has acquired Carolina Door Controls, Inc. (CDC) of Durham, N.C. CDC will become part of DORMA Group North America, which provides a wide range of products for the commercial architectural openings industry. CDC operates 20 branch offices in several major markets throughout the Eastern United States to sell, install and service automatic door products and entrance systems for commercial and industrial applications.

Plans for 2005 include an enhanced customer support program and the introduction of products including hurricane doors, ICU doors and new swing door operators.

Small Format	
indian i or mat	
nterchangeable Co	ores Vady a
the second s	
William M. Lynk A D V A N C	E D Format interchangeaple
eatures of this 309-page virtual "Encyclopedia of	SEIC" Cores
at have NEVER before been discussed/shared in p	
uch items include	
Profiles of BEST Standard and Premium keyways. Photos/diagrams of each.	
Locksmiths would claw each others eyes out for these	
Revolutionary!!!! These easy-to-read [graphic] pin segments for combinating to 2000, perception and the segments for combinating of page that has a segment of the segme	
16,000+ possible combinations of core chambers. Gerry Finch tried it, the s charts attempted it, but my graphic charts are the answer! EVERY possible p	
segment is present. WOW! Check it out	
New – LAB IC Pin Chart. Worked it out with Jerry and Tom at LAB. Excellent Emplains SEC pins that even locksmith down?	
Excellent! Explains SFIC pins that every locksmith doesn't understand but should (per Jerry)	Chapter /
A "Hall of Fame" page for ILA. Worked it out with Kurt; a page	Small Format I-Cores
to be proud of! BEST Servicing information never published outside of BEST	A face harmond is the large "Andrea" of Tanday - Andrea of Tanday - An
NEW!!! Never, ever before has a "Master Keyed SFIC Control	Comparison of the section of th
Key List" ever been published. Even though, it is not an often-	Execution for some the same segments and the same segments Execution for some segments and the same segments are some segments Execution for some segments and the same segments Execution for some segments
used item, my book lists all possible combinations.	A service of the set o
Another WOW! The most comprehensive/up-to-date manual on SFIC tools	The star shows and the last of United. All shows that is a star show that the shows that the shows that the shows the shows the show that the shows the show
anywhere in the world!	
A list of all A4 pin segments for combinating cores. In other words, the locksmith only has to match TMK with CK and the	
entire chamber pinning is listed. Again, never done before in	And at from the second se
the format that I have presented [visual, easy and accurate]	A Did of a did to be and a did
An impressive array of SFIC photos, charts & diagrams never before published (Total = 249 digital photos, 58 charts, 112 di	
8 9 exams). This includes a variety of SFIC original patent diagrams	Order Online
An original letter from Yale to Frank Best in 1921 telling him "No!"	The National Locksmith.com
YES! Send me SFIC: Advanced for \$99.	Name
Special! Also send me I Cores Small Format for \$39.	Name
Special! Also send me Removeable Cores Large Format for \$39.	Shop Name
Plus \$8 for shipping and handling.	
CHOOSE Book or CD	Address (no P.O. boxes)
Orders must be paid in U.S. funds. \$20 foreign shipping rate applies.	City
Select payment Method:	
Check VISA MasterCard Discover	State Zip
American Express Money Order	Disease
Order Total	Phone
Card Number	Fax
Exp. Date	
Signature (required)	E-Mail (optional)

KEY CODES

Master, Part 2 (Combination Lock) 900001-907353

902311	29-07-25	902366	18-24-38	902421	20-30-04	902476	02-04-26	902531	26-28-06	902586	31-21-35
902312	32-14-28	902367	38-24-34	902422	24-26-00	902477	22-32-38	902532	02-16-22	902587	06-12-30
902313	19-09-15	902368	06-32-14	902423	18-20-10	902478	04-22-16	902533	36-22-28	902588	12-14-24
902314	00-22-36	902369	00-30-12	902424	22-36-30	902479	06-36-14	902534	30-08-14	902589	14-36-02
902315	04-22-12	902370	12-30-36	902425	32-34-00	902480	21-23-05	902535	06-20-34	902590	06-36-26
902316	35-05-15	902371	24-10-04	902426	39-05-15	902481	22-12-38	902536	36-06-12	902591	30-32-06
902317	34-20-30	902372	04-22-36	902427	08-10-00	902482	12-26-04	902537	20-38-32	902592	11-01-15
902318	00-30-04	902373	12-02-28	902428	22-00-22	902483	07-33-15	902538	26-12-38	902593	09-31-05
902319	24-38-28	902374	06-24-38	902429	32-22-08	902484	02-20-30	902539	10-20-14	902594	11-29-35
902320	30-16-06	902375	12-14-20	902430	38-16-26	902485	17-31-05	902540	00-18-24	902595	10-24-10
902321	26-32-02	902376	34-00-30	902431	06-20-06	902486	32-38-28	902541	03-25-35	902596	15-01-15
902322	18-20-30	902377	00-18-36	902432	30-36-10	902487	35-13-35	902542	12-14-32	902597	18-36-22
902323	04-10-04	902378	16-02-08	902433	18-32-06	902488	24-34-20	902543	00-26-12	902598	04-22-04
902324	09-19-25	902379	38-28-18	902434	12-02-36	902489	14-32-26	902544	37-11-25	902599	35-17-35
902325	23-33-15	902380	38-16-10	902435	20-34-16	902490	04-26-08	902545	28-14-08	902600	23-09-15
902326	29-15-25	902381	28-34-04	902436	02-20-26	902491	10-24-38	902546	28-30-24	902601	06-36-22
902327	02-16-10	902382	38-28-38	902437	20-06-16	902492	34-20-06	902547	14-32-38	902602	26-00-06
902328	36-06-32	902383	30-36-06	902438	01-07-25	902493	04-26-16	902548	24-14-08	902603	04-22-28
902329	30-00-14	902384	28-34-20	902439	08-38-08	902494	12-14-28	902549	26-28-02	902604	34-36-06
902330	32-02-24	902385	08-22-28	902440	38-28-06	902495	20-22-08	902550	39-25-15	902605	04-30-24
902331	06-24-34	902386	24-06-00	902441	26-36-02	902496	01-11-25	902551	16-30-16	902606	36-02-20
902332	26-32-22	902387	30-04-10	902442	24-30-20	902497	10-24-18	902552	01-31-05	902607	16-26-32
902333 902334	05-35-25 15-21-15	902388 902389	32-06-00 17-23-05	902443 902444	27-17-35 02-28-02	902498 902499	38-08-26 14-16-30	902553 902554	12-02-32 30-20-30	902608 902609	34-20-38 11-13-35
902334 902335	36-14-28	902389	38-00-18	902444 902445	02-28-02 30-32-18		13-03-25	902554 902555	30-20-30 14-16-38	902609	10-32-22
902333 902336	16-22-16	902390	20-38-28	902445	22-32-18	902500 902501	10-32-38	902555	15-21-35	902610	28-06-24
902337 902337	09-31-25	902392	16-06-24	902440	13-15-05	902502	28-02-36	902557	38-12-22	902612	00-22-16
902338	24-26-08	902393	22-04-30	902448	06-16-10	902502	10-00-10	902558	03-09-15	902612	03-05-35
902339	32-10-24	902394	16-22-12	902449	28-38-32	902504	06-32-02	902559	38-00-26	902614	08-10-16
902340	26-08-22	902395	30-20-14	902450	10-24-34	902505	36-10-28	902560	19-01-15	902615	18-32-38
902341	31-05-15	902396	18-00-06	902451	16-38-08	902506	29-35-25	902561	12-14-04	902616	37-19-05
902342	14-24-14	902397	06-12-02	902452	21-11-25	902507	31-01-35	902562	26-32-14	902617	32-06-16
902343	30-20-38	902398	14-16-26	902453	39-21-15	902508	36-38-28	902563	34-16-26	902618	08-14-20
902344	26-16-34	902399	08-34-20	902454	30-12-26	902509	02-04-18	902564	18-20-14	902619	23-37-15
902345	28-18-00	902400	19-37-15	902455	16-22-36	902510	24-10-24	902565	38-00-10	902620	24-34-00
902346	30-04-30	902401	02-24-10	902456	39-25-35	902511	20-30-36	902566	36-38-32	902621	15-17-35
902347	32-02-32	902402	07-29-35	902457	20-10-04	902512	22-00-10	902567	30-16-22	902622	20-34-20
902348	02-28-06	902403	06-08-30	902458	26-32-10	902513	12-02-20	902568	24-02-08	902623	14-24-34
902349	05-31-25	902404	30-20-34	902459	18-04-14	902514	02-04-30	902569	20-38-04	902624	12-22-28
902350	04-18-32	902405	08-22-16	902460	14-20-38	902515	10-32-10	902570	08-30-00	902625	20-10-32
902351	00-22-04	902406	05-23-05	902461	13-35-05	902516	30-32-22	902571	30-00-30	902626	30-08-02
902352	18-08-26	902407	06-24-18	902462	32-10-20	902517	34-12-18	902572	02-32-26	902627	32-14-24
902353	22-04-10	902408	28-18-12	902463	38-16-30	902518	10-36-06	902573	36-10-36	902628	26-16-06
902354	36-02-08	902409	30-04-38	902464	18-20-34	902519	22-36-14	902574	10-16-34	902629	08-34-04
902355	34-16-34	902410	14-24-06	902465	02-12-06	902520	39-05-35	902575	28-10-20	902630	28-10-24
902356	22-32-06	902411	34-20-26	902466	20-02-28	902521	26-04-38	902576	26-36-14	902631	08-30-20
902357	32-38-20	902412	18-36-02	902467	28-14-36	902522	04-06-20	902577	34-24-02	902632	38-04-26
902358 902359	00-14-04 06-24-06	902413 902414	26-28-18 02-08-26	902468 902469	38-20-06 33-19-25	902523 902524	14-36-06 37-27-05	902578 902579	23-09-35 07-09-15	902633 902634	24-02-12 14-28-38
902359 902360	26-00-18	902414	16-38-28	902409	10-00-14	902524	22-00-14	902579 902580	38-08-14	902034	38-28-02
902360 902361	20-02-20	902415	22-00-30	902470	28-10-28	902525	10-36-22	902580	20-22-28	902033	38-00-30
902361	20-02-20 38-28-22	902410	22-00-30 36-14-20	902471	23-25-15	902520	24-02-16	902582	20-22-28	902030	29-03-25
902363	26-04-34	902417	34-24-06	902472	16-34-28	902528	14-00-22	902583	17-31-25	902638	16-30-12
902364	30-16-02	902419	00-02-08	902474	13-39-25	902529	36-38-24	902584	26-16-26	902639	10-36-10
902365	32-34-28	902420	34-12-22	902475	18-36-06	902530	06-32-38	902585	12-34-00	902640	22-04-14
100	T 7 • • /	(T)1) T	. 17	1 1.1							

)	000044	10 10 00 1	000705	00.00.10	000700	10 00 04
	902641	16-18-28	902705	36-22-16	902769	10-28-34
	902642	14-04-18	902706	34-04-14	902770	23-05-35
	902643	22-32-18	902707	26-32-06	902771	09-35-05
	902644	26-08-14	902708	08-10-28	902772	00-06-24
	902645	22-28-22	902709	34-00-06	902773	02-16-38
	902646	32-02-20	902710	14-16-22	902774	34-04-18
	902647	10-12-34	902711			
				36-18-28	902775	16-30-00
	902648	13-39-05	902712	30-36-02	902776	06-20-10
	902649	04-06-32	902713	20-06-28	902777	32-10-28
		30-00-34	902714	08-38-04	902778	10-12-06
	902650					
	902651	18-04-30	902715	00-26-08	902779	32-34-20
	902652	00-02-12	902716	04-18-28	902780	24-02-32
	902653	19-21-15	902717	33-15-05	902781	34-20-14
	902654	28-02-24	902718	27-05-15	902782	08-38-12
	902655	36-18-04	902719	04-10-16	902783	19-05-15
	902656	19-29-35	902720	32-18-36	902784	26-08-18
	902657	21-03-25	902721	06-08-02	902785	20-10-20
	902658	24-02-24	902722	16-34-00	902786	35-05-35
	902659	30-36-30	902723	32-14-08	902787	04-22-00
	902660	14-16-06	902724	18-00-10	902788	10-28-22
	902661	07-37-15	902725	24-06-12	902789	24-26-36
	902662	38-16-34	902726	38-00-06	902790	18-32-26
	902663	23-05-15	902727	28-10-16	902791	34-12-38
	902664	32-10-04	902728	36-22-04	902792	02-04-14
	902665	25-15-05	902729	26-00-26	902793	10-00-26
		28-10-00	902730		902794	
	902666			16-06-20		18-20-02
	902667	06-28-14	902731	30-11-30	902795	25-31-25
	902668	21-07-25	902732	22-08-38	902796	04-10-32
_	902669	14-28-14	902733	22-28-06	902797	14-24-10
	902670	12-30-04	902734	30-16-30	902798	36-10-20
	902671	08-30-08	902735	38-28-34	902799	22-04-26
	902672	26-04-18	902736	02-28-10	902800	19-09-35
	902673	02-08-02	902737	04-10-20	902801	30-08-26
	902674	38-00-22	902738	26-32-38	902802	00-22-28
	902675	36-18-24	902739	28-02-20	902803	13-23-05
	902676	10-28-06	902740	30-36-14	902804	10-16-06
	902677	15-37-15	902741	04-26-00	902805	08-18-00
	902678	38-12-38	902742	26-12-26	902806	04-26-32
	902679	28-30-36	902743	38-24-02	902807	24-06-20
	902680	32-14-32	902744	20-22-00	902808	38-20-34
	902681	26-08-38	902745	38-20-26	902809	05-15-25
	902682	10-24-06	902746	18-04-22	902810	00-18-28
	902683	32-02-08	902747	24-02-20	902811	29-39-05
	902684	00-26-00	902748	14-36-10	902812	03-17-35
	902685	24-38-32	902749	39-09-15	902813	21-31-25
	902686	02-32-38	902750	10-24-30	902814	30-12-06
	902687	08-30-04	902751	26-36-22	902815	13-19-25
	902688	09-15-05	902752	24-30-36	902816	16-06-36
	902689	32-14-20	902753	14-24-18	902817	12-14-08
	902690	36-38-04	902754	00-30-16	902818	16-22-00
	902691	34-04-38	902755	06-36-30	902819	24-38-12
	902692	03-29-15	902756	28-14-20	902820	02-28-18
	902693	00-18-32	902757	26-36-06	902821	26-00-30
	902694	29-15-05	902758	04-22-32	902822	13-15-25
	902695	18-36-18	902759	04-26-12	902823	23-25-35
	902696	01-11-05	902760	02-20-14	902824	22-12-02
	902697	24-30-24	902761	24-06-16	902825	28-06-16
	902698	08-14-00	902762	34-08-30	902826	08-34-00
_						
	902699	34-12-30	902763	24-34-04	902827	02-12-38
	902700	19-25-15	902764	06-20-38	902828	00-06-20
-	902701	16-06-00	902765	20-30-16	902829	20-22-36
	902702	20-30-20	902766	16-30-24	902830	18-28-06
	902703	30-20-26	902767	18-28-18	902831	07-29-15
	902704	06-12-22	902768	05-15-05	902832	17-19-25



Circle 226 on Rapid Reply July 2005 • 131

902833	34-08-34	902897	30-00-26	902961	16-02-36	903025	36-02-36	903089	24-14-00	903153	16-30-16
902834	22-08-18	902898	28-14-28	902962	04-14-32	903026	28-38-16	903090	18-32-06	903154	34-04-38
902835	32-18-12	902899	05-11-05	902963	20-26-00	903027	31-17-35	903091	34-12-18	903155	36-26-04
902836	18-00-18	902900	22-04-22	902964	08-26-16	903028	14-28-22	903092	04-14-08	903156	08-34-28
902837	28-34-16	902901	22-04-22	902965	24-14-24	903029	37-07-25	903093	18-00-06	903157	16-24-34
902838	38-08-22	902902	22-04-22	902966	06-16-22	903030	03-25-15	903094	19-01-35	903158	17-07-25
902839	23-29-35	902903	22-04-22	902967	10-32-18	903031	32-22-28	903095	13-15-05	903159	22-36-10
902840	08-38-28	902904	22-04-22	902968	12-02-24	903032	08-30-12	903096	34-08-38	903160	33-23-05
902841	36-26-08	902905	36-14-04	902969	13-31-25	903033	33-11-25	903097	26-28-34	903161	22-32-02
902842	06-12-18	902906	18-32-14	902970	08-18-32	903034	02-16-02	903098	18-08-02	903162	31-05-15
902843	00-10-24	902907	13-19-05	902971	11-21-15	903035	20-26-32	903099	06-20-30	903163	07-17-35
902844	30-04-22	902908	22-28-10	902972	14-20-30	903036	16-26-12	903100	08-26-12	903164	16-22-04
902845	22-00-06	902909	14-32-18	902973	38-12-26	903037	28-06-00	903101	12-18-24	903165	34-20-34
902846	36-06-00	902910	34-24-10	902974	08-34-08	903038	08-26-12	903102	03-05-35	903166	30-32-26
902847	14-28-10	902911	14-00-10	902975	11-17-35	903039	33-07-25	903103	28-10-16	903167	20-06-12
902848	08-34-28	902912	20-30-24	902976	30-20-10	903040	34-04-34	903104	14-32-06	903168	12-02-16
902849	10-36-26	902913	02-08-14	902977	16-18-36	903041	03-05-15	903105	02-28-22	903169	08-18-12
902850	04-34-08	902914	04-10-28	902978	26-08-34	903042	22-08-02	903106	22-32-18	903170	28-38-16
902851	08-22-12	902915	06-16-30	902979	24-38-20	903043	28-18-36	903107	02-08-14	903171	00-14-28
902852 902853	03-13-35 30-16-26	902916 902917	26-28-22 07-21-15	902980	33-03-25 08-26-32	903044 903045	18-28-14 00-18-04	903108 903109	16-02-16 36-02-36	903172 903173	22-36-30 28-06-12
902853 902854	09-39-05	902917 902918	38-08-34	902981 902982	22-36-02	903045 903046	12-18-12	903109	08-30-36	903173	20-30-12
902855 902855	29-19-25	902918	38-08-34 12-38-08	902982	22-30-02 16-26-16	903040 903047	04-10-00	903110	10-20-30	903174	23-05-35
902856 902856	32-06-36	902919	16-02-12	902983	14-24-02	903047	21-35-05	903112	29-31-05	903175	35-13-35
902857 902857	36-22-08	902920 902921	18-28-38	902985	38-04-14	903048	24-30-12	903112	12-02-20	903170	12-22-36
902858	11-01-35	902922	24-14-00	902986	02-32-02	903050	26-00-12	903114	22-04-34	903178	00-26-04
902859	18-24-10	902923	12-02-08	902987	32-18-24	903051	02-24-02	903115	11-21-15	903179	37-15-05
902860	04-06-00	902924	32-22-00	902988	28-10-36	903052	06-08-34	903116	18-28-10	903180	36-22-12
902861	06-20-30	902925	04-30-04	902989	24-26-32	903053	00-18-08	903117	36-18-12	903181	32-34-16
902862	32-14-36	902926	36-06-28	902990	28-18-08	903054	36-06-24	903118	30-16-22	903182	17-23-05
902863	12-38-12	902927	16-30-08	902991	26-36-26	903055	18-08-22	903119	36-38-20	903183	10-16-30
902864	28-14-04	902928	34-24-14	902992	34-00-34	903056	24-10-16	903120	24-14-08	903184	23-09-15
902865	32-18-00	902929	00-06-28	902993	26-16-10	903057	22-12-26	903121	06-08-22	903185	12-34-12
902866	22-36-18	902930	04-06-24	902994	28-02-32	903058	10-20-38	903122	32-18-32	903186	23-13-35
902867	00-02-16	902931	02-08-38	902995	32-22-36	903059	12-38-32	903123	36-14-32	903187	09-11-25
902868	26-00-22	902932	30-32-26	902996	06-32-18	903060	24-38-04	903124	27-19-25	903188	38-24-14
902869	02-04-34	902933	00-06-32	902997	00-02-24	903061	38-16-06	903125	27-29-35	903189	30-32-02
902870	06-24-30	902934	36-38-20	902998	06-36-02	903062	12-18-36	903126	12-34-04	903190	05-07-25
902871	09-39-25	902935	20-10-24	902999	18-00-14	903063	19-33-15	903127	06-36-18	903191	04-26-16
902872	26-00-10	902936	30-36-22	903000	18-36-30	903064	20-38-20	903128	36-06-12	903192	04-30-12
902873	02-20-34	902937	14-24-30	903001	15-25-35	903065	27-13-35	903129	34-20-10	903193	32-18-04
902874	18-20-38	902938	24-38-08	903002	34-08-22	903066	25-35-05	903130	24-34-08	903194	16-34-12
902875	39-21-35	902939	32-38-32	903003	36-14-32	903067	36-26-04	903131	03-17-35	903195	00-06-24
902876	00-30-36	902940	25-39-25	903004	36-18-36	903068	15-05-15	903132	32-38-12	903196	02-32-06
902877 902878	26-16-38 38-08-30	902941 902942	00-26-04 36-02-16	903005 903006	38-24-10 18-32-02	903069 903070	30-00-10 39-17-35	903133 903134	16-02-20 33-22-04	903197 903198	28-38-08 21-07-25
902878 902879	14-04-38	902942 902943	38-20-38	903007	20-10-16	903070	16-22-04	903134	31-01-15	903198	36-26-08
902879	36-10-04	902943 902944	34-12-02	903008	28-14-00	903072	25-11-05	903136	16-06-24	903200	30-16-38
902881	32-02-36	902945	18-08-14	903009	21-31-05	903073	11-29-35	903137	26-08-26	903201	02-32-26
902882	25-03-25	902946	26-08-26	903010	28-34-00	903074	14-00-22	903138	36-06-36	903202	17-19-25
902883	20-26-16	902947	10-20-02	903011	00-30-20	903075	22-00-34	903139	05-35-05	903203	02-28-34
902884	28-02-08	902948	01-19-25	903012	12-26-08	903076	32-18-36	903140	36-26-12	903204	32-14-20
902885	06-36-06	902949	03-33-15	903013	00-02-36	903077	24-06-20	903141	02-20-26	903205	00-18-28
902886	08-26-08	902950	28-06-12	903014	18-36-10	903078	02-08-18	903142	24-10-32	903206	07-09-15
902887	14-20-14	902951	06-12-06	903015	14-00-06	903079	18-28-02	903143	18-24-34	903207	34-00-30
902888	13-31-05	902952	32-22-16	903016	30-16-10	903080	03-21-35	903144	18-08-26	903208	04-06-16
902889	36-14-00	902953	25-07-25	903017	12-18-28	903081	34-20-26	903145	23-25-15	903209	34-16-38
902890	37-03-25	902954	04-06-16	903018	10-28-14	903082	24-02-20	903146	36-22-08	903210	30-00-10
902891	39-29-15	902955	02-32-06	903019	38-04-22	903083	16-22-36	903147	18-08-34	903211	00-22-00
902892	20-34-12	902956	22-36-06	903020	13-27-05	903084	06-24-06	903148	34-12-34	903212	12-14-36
902893	28-10-00	902957	11-25-15	903021	24-30-00	903085	28-02-28	903149	34-24-30	903213	20-02-08
902894	04-30-12	902958	00-30-00	903022	28-18-32	903086	07-37-15	903150	16-26-32	903214	24-10-20
902895	04-34-28	902959	32-38-16	903023	39-01-35	903087	30-16-06	903151	14-32-18	903215	04-06-32
902896	36-18-32	902960	26-28-34	903024	20-22-04	903088	16-02-32	903152	22-30-12	903216	27-09-35

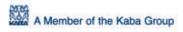


Mission: Outfit Your Mobile Lockshop

Stop by Booth #1105 for your briefing on winning The Ultimate Mobile Lockshop Package Kaba Ilco has made made your mission easy with the introduction of two NEW Van packages. Everything you need to outfit your Mobile Lockshop for the 21st century.

Each package, tailored to fit your budget, includes key machines, transponder equipment, and software. Complete you mission and take your automotive business on the road.

For more details visit our website www.kaba-ilco.com/vanpromo.



Kaba Ilco Corp. www.kaba-ilco.com 800-334-1381 Circle 243 on Rapid Reply



Continued from page 132 Master, Part 2 (Combination Lock) 900001-907353

903217	07 05 05	000000	10 04 06	000040	00 04 04	002406	38-08-38	002460	00 06 04	002522	04 10 22
903217 903218	07-25-35 00-14-36	903280 903281	18-04-26 00-02-12	903343 903344	08-34-24 34-00-14	903406 903407	38-08-38 39-29-35	903469 903470	08-26-04 30-20-30	903532 903533	04-10-32 28-10-36
903218 903219	10-12-34	903281	37-19-25	903344	22-12-22	903407 903408	39-29-35 32-06-12	903470	02-12-26	903533	34-04-26
903220	19-09-15 28-38-20	903283 903284	38-12-38	903346	09-35-25 38-20-02	903409	24-10-36	903472	30-32-18	903535	28-30-36
903221			26-32-38	903347		903410	00-02-36	903473	10-20-02	903536	22-24-38
903222	14-20-14	903285	24-02-08	903348	30-04-34	903411	32-06-28	903474	01-07-25	903537	37-03-25
903223	10-00-34	903286	22-36-14	903349	32-38-08	903412	07-29-35	903475	19-05-35	903538	08-26-16
903224	34-04-30	903287	10-32-02	903350	11-13-35	903413	06-28-14	903476	06-08-14	903539	18-00-22
903225	36-26-00	903288	24-06-32	903351	28-30-00	903414	16-02-36	903477	16-18-36	903540	36-22-00
903226	38-16-38	903289	02-08-38	903352	20-10-00	903415	01-11-05	903478	38-16-26	903541	26-08-18
903227	25-31-05	903290	14-28-02	903353	08-26-08	903416	24-38-08	903479	32-06-16	903542	12-22-32
903228	12-18-28	903291	14-32-38	903354	34-08-18	903417	10-28-38	903480	32-18-08	903543	20-30-04
903229	00-06-00	903292	05-27-05	903355	26-28-10	903418	34-12-22	903481	16-06-32	903544	14-20-30
903230	20-34-12	903293	38-08-34	903356	17-39-05	903419	10-28-22	903482	05-11-05	903545	08-18-24
903231	08-34-00	903294	04-18-08	903357	28-30-08	903420	20-30-36	903483	18-24-14	903546	00-26-16
903232	20-22-00	903295	08-14-24	903358	38-20-06	903421	34-00-26	903484	09-31-25	903547	34-36-26
903233	15-01-35	903296	04-22-12	903359	10-36-02	903422	38-08-18	903485	28-06-16	903548	28-38-04
903234	32-02-28	903297	24-14-24	903360	14-28-34	903423	30-04-22	903486	02-28-14	903549	26-04-38
903235	31-33-15	903298	20-38-32	903361	12-22-28	903424	27-05-35	903487	23-01-15	903550	30-08-26
903236	28-18-32	903299	12-26-04	903362	12-02-24	903425	08-18-08	903488	05-19-25	903551	00-10-04
903237	30-12-02	903300	12-30-04	903363	20-26-32	903426	30-36-26	903489	38-28-22	903552	30-36-18
903238	08-38-32	903301	20-34-04	903364	00-30-36	903427	15-21-35	903490	15-05-15	903553	13-15-26
903239	04-14-28	903302	32-18-00	903365	22-28-18	903428	30-08-34	903491	36-10-36	903554	08-22-00
903240	04-14-00	903303	02-04-34	903366	13-23-05	903429	15-29-35	903492	18-32-22	903555	34-36-14
903241	08-38-20	903304	26-00-18	903367	04-22-04	903430	02-12-22	903493	18-20-06	903556	16-38-24
903242	00-30-16	903305	26-16-22	903368	22-04-26	903431	22-24-10	903494	25-03-25	903557	02-04-22
903243	30-12-30	903306	22-12-02	903369	37-27-05	903432	26-00-34	903495	10-16-22	903558	04-14-04
903244	32-34-00	903307	11-01-15	903370	20-34-28	903433	20-10-16	903496	12-14-20	903559	18-36-30
903245	04-06-12	903308	32-38-16	903371	27-37-15	903434	10-36-18	903497	00-14-08	903560	15-25-35
903246	12-34-28	903309	10-32-18	903372	28-10-04	903435	27-29-15	903498	36-22-28	903561	08-38-04
903247	16-38-16	903310	34-36-02	903373	20-10-36	903436	24-38-32	903499	10-28-34	903562	22-12-34
903248	00-02-20	903311	25-11-25	903374	12-14-32	903437	37-39-25	903500	32-22-36	903563	18-08-22
903249	24-06-24	903312	30-00-14	903375	02-08-26	903438	22-32-26	903501	24-38-04	903564	06-24-38
903250	12-14-08	903313	18-28-38	903376	00-10-36	903439	26-08-14	903502	28-34-12	903565	34-04-14
903251	36-26-20	903314	08-10-24	903377	26-36-26	903440	25-39-25	903503	08-22-28	903566	06-12-06
903252	36-18-00	903315	08-22-12	903378	04-34-16	903441	32-34-20	903504	06-08-26	903567	05-11-25
903253	18-20-34	903316	36-38-24	903379	24-06-28	903442	38-12-22	903505	20-38-24	903568	22-04-14
903254	20-38-28	903317	10-20-06	903380	12-34-24	903443	30-12-22	903506	02-04-30	903569	30-08-22
903255	34-12-26	903318	10-20-30	903381	20-22-04	903444	04-22-16	903507	10-12-18	903570	13-31-25
903256	34-36-10	903319	20-06-28	903382	00-06-32	903445	02-32-10	903508	20-38-12	903571	14-24-10
903257	20-34-00	903320	08-10-36	903383	13-19-25	903446	14-20-34	903509	38-24-34	903572	16-26-36
903258	02-32-38	903321	10-12-26	903384	34-04-18	903447	04-18-00	903510	08-14-36	903573	12-26-36
903259	22-24-02	903322	36-22-32	903385	12-02-28	903448	04-10-36	903511	00-30-08	903574	19-21-15
903260	31-09-35	903323	01-15-25	903386	16-22-12	903449	26-32-18	903512	38-00-22	903575	11-37-15
903261	13-19-05	903324	37-15-25	903387	32-22-12	903450	28-14-24	903513	39-05-35	903576	14-36-22
903262	26-12-06	903325	38-28-06	903388	35-37-15	903451	39-25-15	903514	16-06-00	903577	03-09-15
903263	35-21-15	903326	29-03-25	903389	33-07-25	903452	18-32-38	903515	10-28-02	903578	26-12-38
903264	24-06-12	903327	00-14-32	903390	24-02-28	903453	38-00-26	903516	04-18-36	903579	16-06-20
903265	32-38-32	903328	30-04-38	903391	30-04-26	903454	29-39-05	903517	12-22-00	903580	22-00-26
903266	26-36-22	903329	16-34-04	903392	26-12-30	903455	38-04-18	903518	20-22-08	903581	12-30-12
903267	22-08-22	903330	06-08-30	903393	12-34-08	903456	28-34-24	903519	17-19-05	903582	06-12-38
903268	12-22-12	903331	06-36-22	903394	26-04-34	903457	30-12-34	903520	04-22-00	903583	08-14-04
903269	33-03-25	903332	06-32-14	903395	14-24-06	903458	06-24-30	903521	37-23-05	903584	14-28-06
903270	06-12-34	903333	09-15-05	903396	31-21-35	903459	00-26-32	903522	34-24-18	903585	04-34-00
903271	18-00-18	903334	36-14-36	903397	25-35-25	903460	08-38-28	903523	12-14-04	903586	30-00-34
903272	12-18-12	903335	06-20-26	903398	01-31-05	903461	28-18-12	903524	38-00-34	903587	36-14-24
903273	23-25-35	903336	18-04-22	903399	02-04-14	903462	30-04-18	903525	16-06-28	903588	32-34-04
903274	00-14-00	903337	38-12-30	903400	14-36-26	903463	24-30-08	903526	36-02-20	903589	24-34-04
903275	20-26-20	903338	02-24-06	903401	04-22-32	903464	20-30-20	903527	22-28-10	903590	02-24-02
903276	11-25-15	903339	28-10-32	903402	12-26-20	903465	10-12-38	903528	04-26-12	903591	06-12-18
903277	26-04-22	903340	14-20-06	903403	31-21-15	903466	30-01-15	903529	06-36-30	903592	32-02-20
903278	07-25-15	903341 903341	20-26-16	903403	24-38-12	903467 903467	39-01-15	903530	32-22-08	903593	17-35-25
903278 903279	28-06-24	903341	18-28-18	903404	22-32-38	903467	24-26-16	903531	38-04-14	903593	30-08-38
000210	20 00-24	000042	10 20-10	000-00		000-00	2120-10			000004	00 00 00
104	T 7••4		1 T .	1 •/1		I				I	

903595	36-06-24	903623	23-33-15	903651	06-32-02	903679	26-36-14	903707	28-30-24	903735	17-03-25
903596	15-29-15	903624	04-34-24	903652	08-10-28	903680	18-00-14	903708	25-39-05	903736	30-20-34
903597	19-29-15	903625	26-28-38	903653	30-20-02	903681	04-14-20	903709	01-31-25	903737	32-02-16
903598	10-12-22	903626	29-35-05	903654	06-20-10	903682	28-02-36	903710	19-25-35	903738	06-24-10
903599	34-04-34	903627	22-36-18	903655	16-30-24	903683	02-04-26	903711	16-30-04	903739	04-18-28
903600	21-11-05	903628	26-00-22	903656	10-00-26	903684	22-12-18	903712	12-14-00	903740	00-18-24
903601	14-36-30	903629	30-12-18	903657	28-34-16	903685	20-06-36	903713	30-16-02	903741	18-36-22
903602	17-31-25	903630	06-36-02	903658	36-02-32	903686	04-06-24	903714	04-30-16	903742	26-16-10
903603	26-04-18	903631	01-19-25	903659	34-24-02	903687	36-02-08	903715	08-30-16	903743	24-26-20
903604	36-38-08	903632	28-18-28	903660	38-04-30	903688	28-06-20	903716	08-26-32	903744	26-08-22
903605	04-34-08	903633	06-24-18	903661	24-14-28	903689	30-32-06	903717	26-00-06	903745	12-38-28
903606	06-16-02	903634	10-36-30	903662	32-34-12	903690	34-00-22	903718	02-08-02	903746	22-32-06
903607	21-39-25	903635	38-00-30	903663	24-10-24	903691	01-23-05	903719	39-25-35	903747	16-26-12
903608	16-06-12	903636	34-24-38	903664	26-04-10	903692	18-36-14	903720	38-20-30	903748	10-16-10
903609	08-18-32	903637	30-16-30	903665	24-34-24	903693	14-04-34	903721	35-05-15	903749	24-06-00
903610	10-24-06	903638	26-12-34	903666	38-28-02	903694	04-10-28	903722	34-16-10	903750	06-28-38
903611	08-14-28	903639	14-36-14	903667	20-26-36	903695	34-12-06	903723	06-16-10	903751	25-15-25
903612	30-12-06	903640	12-18-00	903668	36-06-16	903696	36-14-20	903724	10-24-14	903752	18-00-30
903613	36-22-36	903641	11-01-35	903669	06-08-38	903697	22-04-38	903725	00-06-36	903753	18-08-38
903614	18-28-14	903642	12-26-16	903670	04-14-32	903698	28-02-16	903726	38-08-22	903754	34-20-38
903615	12-30-08	903643	14-16-22	903671	34-00-18	903699	38-28-10	903727	33-35-25	903755	36-10-04
903616	01-11-25	903644	16-34-20	903672	34-16-30	903700	22-12-38	903728	30-16-26	903756	32-14-08
903617	12-30-16	903645	06-08-34	903673	18-36-26	903701	16-38-12	903729	01-03-25	903757	16-30-20
903618	00-06-16	903646	02-20-38	903674	00-02-16	903702	20-22-28	903730	20-26-04	903758	10-28-14
903619	18-24-02	903647	05-31-05	903675	12-38-20	903703	28-06-32	903731	01-27-05	903759	04-06-00
903620	00-22-04	903648	36-02-24	903676	10-24-38	903704	10-36-10	903732	28-10-20	903760	34-24-10
903621	10-24-02	903649	15-01-15	903677	12-22-08	903705	14-36-10	903733	00-02-08	903761	04-30-08
903622	11-33-15	903650	15-17-35	903678	36-14-08	903706	08-38-24	903734	20-38-14	903762	22-36-22

Prospero Bianchi

began producing

wrought iron keys

of over

Prospero created

The Desktop Dispatcher

Track your calls on your computer.

- Create it.
- Track it.
- Print it.
- E-mail it to techs.
- Store it to build service history.
- Invoice it.

Starting at \$250.00

For more info and a free demo call 561-714-5240 or visit www.DesktopDispatcher.com



Experience the difference

The Bianchi family

launches key

machines in

Massimo Bianchi

cutting machine

took over the busi-

ness and created the tradition in

first electronic code North Amer

Camillo Bianchi

throughout Europe Iproduction facility North America

the first key catalog, started a mass key

235 years of Italian quality

and craftsmanship.

which was printed & key machine

Today

Bianchi USA

continues the

02176 11-20-14 020287 1-2-21-6 020382 15-2-10 020362 15-2-10 020307 021-05 021085 15-2-21-6 020387 01-2-2-16 020387 01-2-2-16 020387 01-2-2-16 020387 01-2-2-16 020387 01-2-2-16 020387 01-2-2-16 020382 15-2-16 020382 15-2-16 020381 05-2-14 020402 22-2-24 904087 22-2-24 904087 22-2-24 904087 22-2-24 904089 00-22-12 904089 00-22-12 904089 00-22-12 904089 00-22-12 904089 00-22-12 904089 00-22-12 904089 00-22-12 904089 00-22-12 904089 00-22-12 904089 00-22-12 904081 22-2-13 904083 23-2-14 904028 22-2-24 904089 00-22-12 904083 24-2-14 904028 12-2-14 904028 12-2-14 904028 12-2-14 904028 12-2-14 904028 12-2-14 904028 12-2-14 9040130 12-2-14	903763	38-04-10	903827	32-14-24	903891	19-29-35	903955	32-02-32	904019	36-10-32	904083	00-06-12
907676 14-32-10 90382 92-22-16 903867 14-22-30 904026 12-2-28 904027 12-2-28 904028												
90767 01-22 900820 05-325 00086 01-32-2 900272 16-228 900087 02-28-38 900072 02-28-38 900076 02-28-38 900076 02-28-38 900076 02-28-38 900076 02-28-38 900076 02-28-38 900076 02-28-38 900076 02-28-38 900077 12-28-38 900076 02-28-38 900076 02-28-38 900077 12-28-38 900077 12-28-38 900077 12-28-38 900077 12-28-38 900077 12-28-38 900077 12-12-28 900076 02-28-38 900077 12-12-28 900078 02-28-38 900077 12-12-28 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-28-38 900078 02-38-38 900078 02-38-38 900078 02-38-38 900003 02-28-48<												
B0767 10:12:30 B03813 16:53:25 B03866 10:32:22 94/123 22:28:38 B04078 C2:00:00 B04078 C2:00:00 B04087 C2:20:30 B040833 S6:14:10 B04083 C2:20:30 B040833 S6:14:10 B040833 S6:14:10 B040833 S6:14:10 B040833 S6:14:10 B040833 C2:20:10 B040833 C2:20:10 B040833 C2:20:10 B040833 C2:24:12 B040833 C2:24:12 B040843 C2:20:10 B040833 C2:24:12 B040843 C2:20:10 B040833 C2:20:10 B040833 C2:24:12 B040843 C2:20:10 B040833 C2:24:12 B040843 C2:24:12 B040843 C2:20:10 B040833 C2:24:12 B040843 C2:24:12 B040843 C2:24:12 B040833 C2:24:12 B040833 C2:24:12												
B03768 02:12:06 903828 14:24:18 903066 16:20:14 904024 26:24:22 904025 05:22 20 904025 05:22 20 904025 05:22 20 904025 05:22 20 904025 05:22 904025 05:22 904025 05:24 904025 05:24 904025 05:24 904025 05:24 904025 05:24 904025 05:24 904025 05:24 904025 05:24 904035 05:24 9040												
BGT60 C2 20.30 BG3833 S9-14-0 BG387 BC32-14 BG367 BC425 C6-13-06 BG4080 C0-22-12 SG377 17-39-25 BG3835 14-04-30 BG3869 C0-63-05 BG4081 C4-30-00 BG4081 L1-20-10 SG377 12-03-25 BG3835 14-03-30 BG3867 S1-44-6 BG4022 C8-12-4 BG4081 C1-24-5 BG4025 S1-24-15 BG4025 S1-24-2 BG4025 S1-24-2 BG4025 S1-24-25 BG4025 S1-24-2 BG4025 S1-24-2 BG4025 S1-24-25 BG4025 S1-24-25 BG4025 S1-24-25 BG4025 S1-35-64 BG4025 S2-16-05 BG4025 S2-16-05 BG4025 S2-16-05 BG4025 S2-16-05 BG4025 S2-16-05 BG4025 S2-16-05 BG4035 S2-16-05 BG4035 S2-16-05 BG4035 S2-16-05 BG4035 S2-16-05 BG4035 S2-16-05 BG4035 S2-16-05 BG4045 S2-16-05 BG4045 S2-16-05 BG4045 S2												
96377 16:26:16 96384 0:06:20 90386 20:22:12 904026 0:40300 0:4030 0:4131:25 96377 17:32 16:36:00 903836 1:30:36 0:30:36												
90777 17-39-25 903835 14-02-00 903836 14-02-10 90772 15-02-00 903836 90364 24-04-16 904029 24-02-10 90772 15-02-00 903837 30-04-30 90364 24-04-16 904039 24-38-24 903775 31-17-35 903830 00-22-16 903666 22-06-12 903676 10-04-28 903667 10-04-28 903667 10-04-28 903667 10-04-28 903667 10-04-38 904039 22-06-12 903676 10-04-38 904039 22-08-12 904037 16-38-44 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 904039 22-08-12 <	903770								904026	04-30-00	904090	06-16-30
90377 31-01-35 903837 903837 903837 903837 903837 904035 24-38-24 90377 23-442 903837 903830 002-214 903867 10-8438 904031 22-03-12 90377 10-16-38 903841 90-228 903867 22-06 904033 18-32-02 904037 33-19-65 90377 10-16-38 90344 29-34-12 903667 29-0403 18-32-02 904037 33-19-65 903780 24-044 90344 29-34-12 90377 10-164 90434 29-0417 38-10-65 903897 39-12-38 904010 38-10-65 903780 24-044 903971 12-14-24 904037 12-04-12 904011 38-10-65 903781 20-362 903345 30-14-34 904101 38-10-65 903741 12-02-12 904101 38-10-65 903781 20-36-12 903845 30-0444 903811 12-04-68 903371 12-04-26 90388 <td< td=""><td></td><td>17-39-25</td><td>903835</td><td>14-04-30</td><td>903899</td><td>31-09-15</td><td>903963</td><td></td><td>904027</td><td>28-10-00</td><td>904091</td><td></td></td<>		17-39-25	903835	14-04-30	903899	31-09-15	903963		904027	28-10-00	904091	
93377 23-34-28 903838 90-22-19 903802 21-20-29 903867 21-26-29 903867 22-21-20 903867 22-21-20 903867 22-21-20 903877 21-26-29 904076 22-00-10 904069 62-81-80 903877 90-36-22 903867 22-12-06 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904076 22-12-15 904071 12-12-15 904076 22-12-15 904101 32-30-20 903771 12-12-12 904101 22-20-20 903771 12-12-12 904101 12-12-12 904101 12-12-25 904101 12-12-25 904101 12-12-25 904101 12-12-25 904101 12-12-25 904101 12-12-25 904101	903772	16-26-00	903836	13-35-05	903900	14-28-22	903964	24-34-16	904028	06-36-14	904092	14-20-10
903775 31-17-35 900839 00-22-26 903094 25-02-05 903097 10-16-28 903049 22-02-49 903089 16-22-12-06 904083 16-32-29 904093 16-32-29 904093 16-32-29 904093 16-32-12 904093 16-32-12 904093 18-32-29 904093 22-02-36 903371 17-27-05 904093 23-02-24 903397 17-27-05 904093 90-62 903371 17-27-05 904093 90-62 904093 90-62 904093 90-62 90377 22-04-20 904384 90-64 904039 90-62 904038 90-64 904039 22-00-3 904103 22-30-4 904039 22-00-43 904111 22-01-43 903171 22-34-48 904039 22-00-33 904101 16-22-28 904101 16-22-28 904101 16-22-28 904101 16-22-28 904101 16-22-28 904101 16-22-28 904101 16-22-28 90376 22-46-18 904039 12-22-18 903161 16-2-29	903773	31-01-35	903837	30-08-30	903901	20-10-28	903965	15-21-15	904029	34-20-30	904093	24-38-24
90377 00-66-28 90384 22-06-24 903868 22-12-06 903021 16-32-29 904097 33-19-06 903777 01-66.38 903844 22-27-06 903970 36-10-16 904074 23-05-15 904099 36-06-6 903778 22-42-28 903844 30-07-02 903970 36-24-24 904065 21-12-28 904090 96-06-22 903780 26-14-08 903844 30-002 903970 14-42-26 904065 06-12-38 904101 10-10-22 90378 26-02-26 903847 02-14-36 903971 12-42-26 904066 06-16-34 903911 12-22-10 903976 12-16-06 904040 28-39-20 904110 10-10-22 903161 28-20-20 903471 12-62-28 904106 16-30-20 90377 21-16-06 904044 33-39 29-0410 16-20-2 904101 16-20-2 90377 21-16-06 904040 16-32-2 904110 16-02-2 90377 21-16-06 903091		28-34-28	903838		903902		903966		904030	10-16-06	904094	
903777 10-16-38 903841 903805 22-02-4 903869 06-28-22 904073 18-22-0 904078 903778 24-02-28 903843 25-27-06 903907 34-24-34 903971 17-27-05 904073 21-12-38 904091 06-32-38 903780 28-14-468 903845 30-00-26 903397 04-14-22 904073 12-12-38 904111 21-00-22 903783 26-42-28 903845 30-00-6 903375 32-44-48 904039 22-00-33 904116 12-10-22 903785 26-40-28 903847 02-16-34 903391 12-18-48 904039 22-00-33 904116 22-12-22 904116 12-12-28 904161 12-12-28 9031616 12-18-48 904039 22-00-33 904163 28-30-20 903767 21-01-44 903816 16-12-21 903176 22-18-85 904161 12-12-28 904161 12-12-28 904161 12-12-28 904161 12-12-28 904161 12-12-2									904031		904095	
903778 02-32-18 903842 22-34-12 903870 17-35-65 90370 26-1-16 904035 21-11-25 904098 00-22-36 903780 28-14-06 903844 093070 28-14-08 904037 12-2.38 904101 08-00-32 903781 20-382 903846 06-16-34 90390 28-365 903376 14-124 904037 12-2.38 904101 08-00-62 903782 26-02-26 903847 28-16-34 903911 12-18-36 904037 12-12-38 904103 22-2.42 904103 22-3.42 904104 28-38-28 904104 28-38-28 904105 02-16-26 90377 26-12-44 903816 12-11-20 90377 02-10-24 90316 12-14-34 903917 02-16-16 90377 20-10-24 90316 12-14-34 903914 02-15-26 904104 23-32-26 904104 23-32-26 904106 63-02-16 903787 20-10-24 903851 08-10-32 903986 02-15-26												
903779 24-02-32 903643 22-27.65 903780 34-24-34 903711 17-27.05 904036 30-12-28 904036 30-12-28 904036 30-12-28 904100 66-32-38 903780 28-02-28 903844 00-164 903910 12-18-36 904037 12-48-38 904037 12-24-80 904101 16-32-12 904110 10-00-22 903784 28-00-28 903844 24-14-44 903911 12-16-36 903975 12-18-36 9040401 16-32-28 904105 10-16-26 903785 12-44-20 903865 16-18-08 903917 13-32-55 904041 15-22-28 904106 06-16-26 903780 04-34-04 903850 16-18-08 903917 13-32-55 904041 13-32-26 904107 36-16-22 903780 34-62-09 903865 34-16-2 903980 91410 94-10-24 940145 93-22-26 940140 94-26-88 903780 36-388 903865 34-16-22												
903780 28-14-08 903844 09-10-02 903909 22-22 903971 20-238 904101 38-00-06 903781 20-382 903840 09-16-34 903910 12-18-36 903974 14-22-28 904039 22-00-30 904103 22-00-30 904106 65-30 90376 22-00-30 904106 65-30 90376 22-00-30 903110 22-00-40 903937 20-300 904104 33-32-5 903831 22-05-30 904104 33-32-5 9039381 18-2-04 9039383 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
903781 20.98.20 903845 30.00.26 903910 23.29.35 903937 24.12.42 904038 06.38.26 904103 24.20.30 904113 24.20.20 903144 24.14.04 903917 21.83.65 903977 22.34.08 904040 22.83.28 904104 16.22.29 904104 16.22.29 904104 16.22.29 904104 16.22.29 904104 16.22.29 904104 16.22.29 904104 16.22.29 904104 16.30.12 904106 66.30.20 903767 02.01.24 903316 03.37.35 903377 02.26.05 904041 16.30.12 904106 66.30.20 903773 02.01.22 904104 18.32.26 904104 18.32.26 904104 18.33.32 904104 18.33.32 904104 18.33.32 904104 18.33.33 20.3010 04.22.08 904104 18.33.32 904104 18.33.32 904104 14.33.33 904104 14.33.34 904111 24.02.0 904111 24.22.08 904111 24.22.08 904111 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>												
903782 26-02-26 90384 0-16-16-34 903911 12-18-36 904039 22-03-30 904039 22-03-30 904039 22-03-30 904039 22-03-30 904030 22-03-30 904030 22-03-30 904040 28-38-28 904104 10-12-02 903767 24-34-04 903816 16-8-06 903917 12-18-06 904041 16-32-28 904100 02-16-26 903767 24-34-04 903851 08-30-12 903916 07-13-35 903979 02-30-00 904044 33-32-29 904100 04-22-08 90376 04-30-15 903855 08-10-16 90386 04-20-30 904044 33-92-39 904109 04-22-08 903791 02-20-14 903855 0-18-32 903919 36-38-12 903865 34-16-29 904049 15-37-15 904111 04-10-30 903792 12-30-36 903855 0-18-32 903824 12-82-66 903865 34-16-29 904049 15-37-15 9041112 14-0-0-												
903783 26-00-26 903847 02-16-34 903917 03-24-08 904040 28-38-20 903784 13-04-34 903848 22-10-14 903913 38-28-18 903977 12-10-28 904041 16-22-28 904105 02-16-26 903785 12-34-20 903849 22-00-14 903913 38-28-18 903977 02-26-08 904041 16-32-28 904105 02-16-26 903787 02-10-24 903851 08-30-12 903916 13-35-25 904044 18-32-28 9041018 18-22-38 904101 28-36-26 904104 18-22-38 904101 28-36-26 904104 14-22-08 904101 28-36-28 904104 18-22-38 904101 28-36-28 904104 14-22-08 904111 04-12-20 90377 13-30 903878 38-26-00 904047 38-00-18 904111 04-12-20 903791 02-20-14 903855 22-01-20 903986 38-16-20 904046 14-21-14 9041110 04-10-24												
903784 89-04-34 903848 24-14-04 903913 82-20-10 903976 12-18-08 904041 16-22-22 904176 02-16-26 903786 0-43-04 903850 16-18-08 903914 03-21-15 903977 00-26-08 904041 16-22-20 904170 36-16-02 903787 20-10-24 903851 08-30-12 903917 13-35-25 904044 33-32-25 904108 36-02-16 903789 37-18-04 903853 34-08-02 903917 13-35-25 904044 38-16-34 904144 38-00-18 904110 42-0-28 903790 39-05-15 903854 0-18-32 903919 66-38-12 903914 24-0-38 904444 38-00-18 904111 42-0-6 28 903793 22-20-14 903865 30-18-22 904049 15-37-15 904114 20-10-2 903793 22-28-22 903850 18-12-36 903986 34-16-26 904046 13-37-15 904114 20-10-2												
903785 12.34-20 903849 22-00-14 903813 38-28-18 903977 08-26-20 904041 18-22-28 904105 02-16-26 903787 20-10-24 903851 09-30-12 903816 07-13-35 903978 00-2-06 904043 18-32-26 904107 38-16-02 903788 24-30-20 903853 34-06-02 903815 17-33-55 903818 18-20-38 904045 30-22-28 904100 04-22-08 903790 30-05-15 903856 00-3812 903883 08-20-00 904044 38-16-24 904110 24-06-28 903791 20-20-14 903856 02-014 903856 20-14-20 903856 22-14-0 903856 22-14-21 903981 18-2-20 904048 14-24-14 904111 21-0-04 903792 12-30-68 903856 22-16-10 903856 22-42-12 903896 16-32-20 904049 15-37-15 904117 12-13-5 903797 2-0-12 903856												
903766 0-34-04 903850 16-18-08 903914 03-21-15 9039778 20-12-12 904107 38-16-02 903787 20-10-24 903855 08-10-10 903915 17-13-35 903979 20-30-00 904043 18-32-28 904107 38-16-02 903788 37-18-04 903855 08-10-00 903911 11-32-52 904044 33-39-25 904100 08-22-08 903793 37-05-15 903856 08-26-03 904046 38-16-34 904111 28-06-28 903792 12-30-36 903856 30-212 903892 06-220 904047 38-01-18 904111 21-10-24 903792 12-30-36 903856 32-11-05 903822 24-26-12 903896 06-22-15 9040451 04-18-32 904111 21-10-04 903795 22-20-30 903856 06-32-15 903895 06-26-20 904051 04-18-32 904115 21-35-05 903797 34-00-10 903856 10-22-18												
903787 20-10-24 903851 08-30-12 903915 07-13-35 903990 21-36-25 904104 31-38-26 904107 33-16-12 903788 24-02-20 903853 34-06-02 903916 14-24-30 903990 21-36-25 904104 33-39-25 904110 94-22-08 903780 33-06-15 903855 34-06-02 903917 13-35-25 903981 18-20-38 904045 30-018 904110 94-22-08 903780 32-02-14 903855 01-83-75 903987 32-04-04 904047 33-60-15 904111 04-10-24 903792 12-30-36 903856 31-16-26 904048 14-24-14 901112 21-10-24 903793 36-01-09 903858 25-11-05 903921 12-36-16 903986 16-26-20 904050 03-25-15 904114 20-116 21-35-05 903793 34-00-18 903862 16-20-64 904050 03-25-15 903986 12-13-5 904117 14-20-16												
900768 24-30-20 903852 08-10-00 903816 14-24-30 903981 18-20-38 904444 33-38-25 9041049 33-36-25 9041049 33-36-25 9041049 33-36-25 904104 33-36-25 904104 33-36-25 904111 24-06-28 904111 24-06-28 904111 24-06-28 904111 24-06-28 904111 24-06-28 904111 24-06-28 904111 24-06-28 903781 22-26-12 903865 36-20-12 903984 32-14-24 904047 38-0014 904111 24-06-28 903790 22-36-22 903856 30-20-66 903922 24-26-12 903986 16-26-20 904050 03-25-15 904111 20-10-04 903796 36-10-28 903850 10-6-28 903922 12-26-16 903987 16-38-28 904051 04-12-0 9041115 20-06-20 903797 36-0-10 903826 10-25-10 904054 35-05-35 901117 14-28-10 903790 12-26-16 <												
903789 37-18-04 903853 34-08-02 903917 13-35-25 903981 18-20-38 904045 30-20-26 904110 28-06-28 903790 39-05-15 903856 02-14 903856 22-014 903856 32-02-12 903991 08-36-12 903983 08-26-00 904047 38-00-18 904111 04-10-24 903792 12-30-36 903856 32-02-12 903920 20-02-12 903985 32-16-26 904048 14-24-14 904111 24-00-24 903786 36-10-28 903857 41-626 904049 15-37-15 904116 21-35-05 903786 36-10-28 903826 19-36-16 903982 28-28-06 904052 01-0-04 903789 10-018 903860 18-36-15 903982 18-36-16 903982 12-36-16 904116 12-35-05 903799 10-018 903863 31-15-25 903921 10-36-10 903926 12-28-16 904053 16-212 904116 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>												
903790 39-05-15 903854 00-28-36 903918 08-30-04 903982 05-23-05 904047 38-00-18 904111 04-10-24 903791 02-20-14 903855 00-18-32 903919 36-38-12 903983 08-26-00 904047 38-00-18 904111 04-10-24 903793 02-28-22 903857 30-20-06 903921 04-26-08 903985 34-16-28 904049 15-37-15 904114 20-10-04 903794 06-86-10 903850 04-06-28 903922 12-36-18 903986 16-38-28 904051 04-18-32 904115 20-06-20 903797 36-10-28 903860 10-41-26 903922 12-36-16 903983 11-21-35 904115 20-06-20 903793 10-00-18 903861 10-12-26 903927 12-36-16 904055 16-02-12 904117 12-8-10 903800 10-00-18 903862 063863 33-15-25 903927 12-36-10 904055 16-02-12 <td></td>												
903791 02-20-14 903855 00-18-32 903919 36-38-12 903980 02-26-10 904047 38-00-18 904111 04-10-24 903792 12-30-36 903856 32-02-12 903920 20-02-12 903985 34-16-26 904049 15-37-15 904113 27-13-35 903794 06-36-10 903858 25-11-05 903922 22-26-12 903986 16-26-20 904050 03-25-15 904114 20-10-04 903796 26-09-35 903860 06-8-34-16 903927 12-36-14 903988 26-28-06 904052 00-10-20 904115 20-06-20 903796 05-10-18 903862 12-66-08 903926 00-20-10 904053 11-12-35 904117 14-28-10 903798 10-0-18 903862 0-10-00 903927 12-38-16 904055 16-0-12 904111 04-06-20 903798 10-0-18 903865 0-14-24 903927 12-33 904121 18-0-34 <												
903782 12-30-36 903865 32-02-12 903921 04-26-08 903985 32-14-04 904448 14-24-14 904112 14-00-30 903793 22-28-22 903857 30-20-06 903921 04-26-08 903985 34-16-26 904409 15-37-15 904113 27-13-35 903796 66-36-10 903850 04-06-28 903921 16-36-18 903987 16-38-28 904051 04-18-32 904115 20-10-04 903796 36-10-28 903860 08-34-16 903924 10-36-14 903981 16-36-28 904051 04-18-32 904115 21-35-05 903797 34-00-10 903861 10-12-06 903825 19-25-15 903892 02-28-06 904053 11-21-35 904118 28-38-12 903798 10-00-18 903863 35-155 903892 10-20-10 904055 16-02-12 904118 28-38-12 903800 38-08-26 903866 10-21-81 903930 00-10-20 904056 20-10-32 904112 46-28-28-18 903802 12-61-12 904110												
903793 22-28-22 903857 30-20-06 903921 04-26-08 903985 34-16-26 904049 15-37-15 904113 27-13-35 903794 06-361 903855 25-11-05 903922 18-36-18 903986 16-26-20 904050 10-41-83 904114 20-10-24 903795 36-10-28 903860 08-34-16 903924 10-36-14 903988 22-28-06 904052 01-10-20 9041117 12-38-16 903796 10-0118 903862 16-26-08 903326 01-20-10 904054 35-05-35 904119 04-06-20 903799 12-34-16 903864 36-10-0 903929 10-20-10 904055 16-02-12 904119 04-06-20 903801 38-08-26 903864 36-10-29 903932 30-00-22 904057 20-10-32 904120 26-28-18 903801 38-02-26 903866 10-28-10 903930 30-00-22 904053 20-34-08 904122 36-12-35												()
903794 06-38-10 903858 25-11-06 903922 24-26-12 903986 16-28-20 904051 04-18-32 904115 20-10-04 903795 23-09-35 903860 08-34-16 903923 18-36-18 903987 16-38-28 904051 04-18-32 904116 21-35-05 903797 34-00-10 903861 10-12-06 903924 10-36-14 903980 12-20-10 904053 31-12-35 904116 21-35-05 903798 10-00-18 903863 33-15-25 903927 12-38-16 903990 10-20-10 904055 16-21-12 904119 04-06-20 903801 30-01-8 903865 00-14-24 903920 02-26-00 904057 20-10-32 904112 18-04-34 903803 08-18-36 903866 10-28-10 903930 01-024 904057 20-10-32 904123 35-17-35 903804 08-27-05 903866 00-28-34 903937 36-30-4 9039367 16-34-28 904125												
903795 23-08-35 903850 04-06-28 903923 18-36-18 903987 16-38-28 904051 04-18-32 904115 20-06-20 903796 36-10-28 903860 08-34+16 903925 19-25-15 903988 26-28-06 904052 01-120 904116 21-35-05 903798 10-00-18 903861 10-12-06 903925 19-25-15 903990 10-20-10 904053 11-21-35 9041117 14-28-10 903799 12-34-16 903863 33-15-25 903928 12-30-44 903920 0-26-00 904055 16-02-12 904112 26-28-18 903801 30-01-8 903865 00-14-24 903929 30-00-22 903933 34-00-66 904057 20-10-32 904121 18-04-34 903802 02-26-06 903866 10-28-10 903933 14-36-10 903934 26-16-20 904058 10-34-28 904123 35-1-35 903804 09-27-05 903860 06-16-22 903937												
903796 36:10-28 903860 08:34:16 903924 10:36:14 903988 26:28:06 904052 00:10:20 904116 21:35:05 903797 34:00-10 903862 16:26:06 903925 10:20:10 904053 11:21:35 904117 14:28:10 903799 12:34:16 903862 16:20:00 903925 10:20:10 904055 16:02:12 904118 28:38:12 903801 38:08:26 903864 36:10:00 903928 12:30:24 903994 26:16:02 904055 16:02:12 9041121 18:04:34 903801 30:00:22:8:06 903865 10:28:10 903931 36:38:04 903994 26:16:02 904058 10:34:28 904122 36:14:28 903804 09:27:05 903866 06:16:22 903932 11:17:35 903996 12:26:12 904060 02:28:38 904124 09:23:05 903806 14:20:38 903870 2:40:61 903836 10:32:24 904066 6:22:16 90412												
903797 34-00-10 903861 10-12-06 903925 19-25-15 903989 22-28-06 904053 11-21-35 904117 14-28-10 903798 10-00-18 903863 315-25 903927 12-38-16 903991 18-00-34 904055 16-02-12 904118 24-38-12 903800 38-08-26 903864 36-10-00 903928 12-30-24 903992 0-26-00 904055 26-08-34 904120 26-28-18 903800 02-28-06 903866 00-12-810 903930 01-024 903994 26-16-02 904055 16-34-28 904123 35-21-35 903803 02-28-06 903866 06-16-22 903933 14-34-12 903997 00-30-00 904059 16-34-28 904123 35-21-35 903805 03-65-15 903866 03-16-22 903933 14-34-12 903997 00-30-00 904061 10-20-34 904122 6-6-62 903805 14-20-38 903870 24-06-16 903933												
903798 10-00-18 903862 16-26-08 903926 00-10-00 903990 10-20-10 904054 35-05-35 904118 28-38-12 903799 12-34-16 903863 33-15-25 903927 12-38-16 903991 18-00-34 904055 16-02-12 9041119 04-06-20 903801 30-00-18 903865 00-14-24 903929 30-02-22 903993 34-00-06 904057 20-10-32 904121 18-04-34 903802 02-28-06 903866 10-28-10 903930 00-10-24 903995 22-24-34 904058 20-34-08 904123 35-21-35 903805 03-65-15 903866 66-6-22 903933 04-34-12 903997 00-30-00 904061 10-20-34 904125 20-6-32 903805 03-65-15 903870 24-06-16 903393 10-32-24 904062 38-16-30 904126 16-38-20 903806 14-20-38 903871 18-24-10 903935 10-36-26 903990 <td></td>												
903800 38-08-26 903864 36-10-00 903928 12-30-24 903992 00-26-00 904056 26-08-34 904120 26-28-18 903801 30-00-18 903865 00-14-24 903930 00-10-24 903994 26-16-02 904057 20-10-32 904121 18-04-34 903802 02-28-06 903866 10-28-10 903930 00-10-24 903995 22-24-34 904058 20-34-08 904122 36-14-28 903804 09-27-05 903868 06-16-22 903933 14-34-12 903996 12-26-12 904060 02-28-38 904124 09-23-05 903805 03-05-15 903870 24-06-16 903935 10-24-34 904063 22-28-14 904125 02-06-32 903807 26-16-06 903871 18-24-10 903935 10-36-26 903999 04-18-04 904063 22-28-14 904125 02-06-22 903808 0-2-2.08 903873 38-24-18 9039373 35-17-35 904001 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>904054</td> <td></td> <td></td> <td></td>									904054			
903801 30-00-18 903865 00-14-24 903929 30-00-22 903993 34-00-06 904057 20-10-32 904121 18-04-34 903802 02-28-06 903866 10-28-10 903993 00-10-24 903995 22-24-34 904059 16-34-28 904123 35-21-35 903803 08-18-36 903867 28-34-20 903933 04-34-12 903996 12-26-12 904060 02-28-38 904124 09-23-05 903805 03-05-15 903867 24-06-16 903933 16-32-200 903999 04-18-04 904060 22-28-38 904126 16-38-20 903807 26-16-06 903871 18-32-18 903933 10-36-26 903999 04-18-04 904063 22-28-14 904128 08-18-04 903809 39-21-15 903873 38-24-18 903937 35-17-35 904001 10-36-22 904064 63-22-10 904128 08-18-04 903810 30-36-02 903873 38-24-18 903939 </td <td></td> <td>12-34-16</td> <td></td> <td></td> <td></td> <td>12-38-16</td> <td>903991</td> <td>18-00-34</td> <td>904055</td> <td></td> <td>904119</td> <td>04-06-20</td>		12-34-16				12-38-16	903991	18-00-34	904055		904119	04-06-20
903802 02-28-06 903866 10-28-10 903930 00-10-24 903994 26-16-02 904058 20-34-08 904122 36-14-28 903803 08-18-36 903867 28-34-20 903931 36-38-04 903995 22-24-34 904059 16-34-28 904123 35-21-35 903804 09-27-05 903868 06-16-22 903933 04-34-12 903997 00-30-00 904061 10-20-34 904125 20-06-32 903806 14-20-38 903870 24-06-16 903934 16-22-00 903999 04-18-04 904062 38-16-30 904125 20-06-32 903807 26-16-06 903871 18-32-18 903936 04-30-24 904000 24-34-00 904063 22-28-14 904120 08-18-04 903803 39-21-15 903873 38-24-18 903937 35-17-35 904001 10-36-22 904065 18-04-18 904120 35-2-35 903811 24-26-04 903875 30-00-30 903939 <td>903800</td> <td>38-08-26</td> <td>903864</td> <td>36-10-00</td> <td>903928</td> <td>12-30-24</td> <td>903992</td> <td>00-26-00</td> <td>904056</td> <td>26-08-34</td> <td>904120</td> <td>26-28-18</td>	903800	38-08-26	903864	36-10-00	903928	12-30-24	903992	00-26-00	904056	26-08-34	904120	26-28-18
903803 08-18-36 903867 28-34-20 903931 36-38-04 903995 22-24-34 904059 16-34-28 904123 35-21-35 903804 09-27-05 903868 06-16-22 903932 11-17-35 903996 12-26-12 904060 02-28-38 904124 09-23-05 903805 03-05-15 903869 33-19-25 903933 04-34-12 903997 00-30-00 904061 10-20-34 904125 20-66-32 903806 14-20-38 903871 18-32-18 903935 10-36-26 903999 10-24-34 904062 38-16-30 904125 06-20-02 903808 00-22-08 903872 18-24-10 903936 04-30-24 904000 24-34-20 904064 06-32-10 904128 08-18-04 903810 30-36-22 903873 38-24-18 903937 35-17-35 904001 10-36-22 904066 36-22-16 904130 35-25-35 903811 24-26-04 903876 07-21-15 903939 <td>903801</td> <td>30-00-18</td> <td>903865</td> <td>00-14-24</td> <td>903929</td> <td>30-00-22</td> <td>903993</td> <td>34-00-06</td> <td>904057</td> <td>20-10-32</td> <td>904121</td> <td>18-04-34</td>	903801	30-00-18	903865	00-14-24	903929	30-00-22	903993	34-00-06	904057	20-10-32	904121	18-04-34
903804 09-27-05 903868 06-16-22 903932 11-17-35 903996 12-26-12 904060 02-28-38 904124 09-23-05 903805 03-05-15 903869 33-19-25 903933 04-34-12 903997 00-30-00 904061 10-20-34 904125 20-06-32 903806 14-20-38 903871 18-32-18 903935 10-36-26 903999 04-18-04 904062 38-16-30 904126 16-38-20 903806 00-22-08 903871 18-24-10 903936 04-30-24 904000 24-34-20 904066 6-32-10 904128 08-18-04 903810 30-36-02 903871 38-24-18 90337 35-17-35 904001 10-36-22 904065 36-22-16 904130 35-25-35 903811 24-26-04 903875 30-00-30 903939 02-20-10 904002 08-14-08 904066 36-22-16 904131 00-26-12 903812 03-29-15 903876 07-21-15 903940		02-28-06							904058		904122	
903805 03-05-15 903869 33-19-25 903933 04-34-12 903997 00-30-00 904061 10-20-34 904125 20-06-32 903806 14-20-38 903870 24-06-16 903934 16-22-00 903998 10-24-34 904062 38-16-30 904126 16-38-20 903807 26-16-06 903871 18-32-18 903935 10-36-26 903999 04-18-04 904063 22-28-14 904127 06-20-02 903808 00-22-08 903872 18-24-10 903936 04-30-24 904000 24-34-20 904064 06-32-10 904129 24-10-04 903810 30-36-02 903873 38-24-18 903939 02-20-10 904002 08-14-08 904066 36-22-16 904130 35-25-35 903811 24-26-04 903875 30-00-30 903939 02-20-10 904004 04-26-04 904068 27-03-15 904131 00-26-12 903812 03-20-15 903877 39-01-35 903941 <td></td>												
90380614-20-3890387024-06-1690393416-22-0090399810-24-3490406238-16-3090412616-38-2090380726-16-0690387118-32-1890393510-36-2690399904-18-0490406322-28-1490412706-20-0290380800-22-0890387218-24-1090393604-30-2490400024-34-2090406406-32-1090412808-18-0490380939-21-1590387338-24-1890393735-17-3590400110-36-2290406518-04-1890412924-10-0490381030-36-0290387404-22-2890393818-08-3090400208-14-0890406636-22-1690413035-25-3590381124-26-0490387530-00-3090393902-20-1090400208-14-0890406636-22-1590413100-26-1290381203-29-1590387607-21-1590394023-37-1590400404-26-0490406827-09-1590413209-39-0590381338-20-2690387739-01-3590394114-04-3890400506-24-1490406931-37-1590413322-08-2690381510-00-690387922-32-1090394300-10-1690400732-09-1590413522-08-1490381510-00-690388114-20-2690394424-14-3690400836-93-590407109-11-0590413522-08-1490381626-12-2690388010-24-10												
90380726-16-0690387118-32-1890393510-36-2690399904-18-0490406322-28-1490412706-20-0290380800-22-0890387218-24-1090393604-30-2490400024-34-2090406406-32-1090412808-18-0490380939-21-1590387338-24-1890393735-17-3590400110-36-2290406518-04-1890412924-10-0490381030-36-0290387404-22-2890393818-08-3090400208-14-0890406636-22-1690413035-25-3590381124-26-0490387530-00-3090393902-20-1090400326-16-3890406724-26-3290413100-26-1290381203-29-1590387607-21-1590394023-37-1590400404-26-0490406827-09-1590413209-39-0590381338-20-2690387739-01-3590394114-04-3890400506-24-1490406931-37-1590413322-08-2690381510-00-0690387922-32-1090394204-10-1690400728-14-0090407109-11-0590413522-08-1490381626-12-2690388010-24-1090394224-14-3690400728-14-0090407332-38-2090413634-36-3090381714-24-3890388114-20-2690394228-10-2490400924-30-0490407332-38-2090413634-36-3090381626-12												
90380800-22-0890387218-24-1090393604-30-2490400024-34-2090406406-32-1090412808-18-0490380939-21-1590387338-24-1890393735-17-3590400110-36-2290406518-04-1890412924-10-0490381030-36-0290387404-22-2890393818-08-3090400208-14-0890406636-22-1690413035-25-3590381124-26-0490387530-00-3090393902-20-1090400326-16-3890406724-26-3290413100-26-1290381203-29-1590387607-21-1590394023-37-1590400404-26-0490406827-09-1590413209-39-0590381338-20-2690387739-01-3590394114-04-3890400506-24-1490406931-37-1590413322-08-2690381510-00-0690387922-32-1090394300-10-1690400728-14-0090407109-11-0590413438+12-3490381626-12-2690388010-24-1090394528-10-2490400924-30-0490407332-38-2090413634-36-3090381714-24-3890388114-20-2690394528-10-2490401008-22-1690407430-36-3090413634-36-3090381828-06-3690388226-16-3090394614-04-2690401008-22-1690407534-16-0690413813-31-0590381906-16												
90380939-21-1590387338-24-1890393735-17-3590400110-36-2290406518-04-1890412924-10-0490381030-36-0290387404-22-2890393818-08-3090400208-14-0890406636-22-1690413035-25-3590381124-26-0490387530-00-3090393902-20-1090400326-16-3890406724-26-3290413100-26-1290381203-29-1590387607-21-1590394023-37-1590400404-26-0490406827-09-1590413209-39-0590381338-20-2690387739-01-3590394114-04-3890400506-24-1490406931-37-1590413322-08-2690381412-14-2490387804-26-2090394204-10-1690400635-09-1590407039-09-1590413438-12-3490381510-00-0690387922-32-1090394300-10-1690400728-14-0090407109-11-0590413522-08-1490381626-12-2690388010-24-1090394528-10-2490400924-30-0490407332-38-2090413734-36-3090381714-24-3890388114-20-2690394733-11-2590401008-22-1690407430-36-3090413813-31-0590381906-16-0690388306-28-1890394733-11-2590401106-28-0690407534-16-0690413932-10-2490382125-31												
90381030-36-0290387404-22-2890393818-08-3090400208-14-0890406636-22-1690413035-25-3590381124-26-0490387530-00-3090393902-20-1090400326-16-3890406724-26-3290413100-26-1290381203-29-1590387607-21-1590394023-37-1590400404-26-0490406827-09-1590413209-39-0590381338-20-2690387739-01-3590394114-04-3890400506-24-1490406931-37-1590413322-08-2690381412-14-2490387804-26-2090394204-10-1690400635-09-1590407039-09-1590413438-12-3490381510-00-0690387922-32-1090394300-10-1690400728-14-0090407109-11-0590413522-08-1490381626-12-2690388010-24-1090394424-14-3690400924-30-0490407332-38-2090413634-36-3090381714-24-3890388114-20-2690394528-10-2490400924-30-0490407332-38-2090413813-31-0590381906-16-0690388226-16-3090394614-02-2690401106-28-0690407430-36-3090413813-31-0590381906-16-0690388306-28-1890394733-11-2590401106-28-0690407534-16-0690413932-10-2490382032-22												
90381124-26-0490387530-00-3090393902-20-1090400326-16-3890406724-26-3290413100-26-1290381203-29-1590387607-21-1590394023-37-1590400404-26-0490406827-09-1590413209-39-0590381338-20-2690387739-01-3590394114-04-3890400506-24-1490406931-37-1590413322-08-2690381412-14-2490387804-26-2090394204-10-1690400635-09-1590407039-09-1590413438-12-3490381510-00-0690387922-32-1090394300-10-1690400728-14-0090407109-11-0590413522-08-1490381626-12-2690388010-24-1090394424-14-3690400803-09-3590407210-36-0690413634-36-3090381714-24-3890388114-20-2690394528-10-2490400924-30-0490407332-38-2090413734-36-2290381828-06-3690388226-16-3090394733-11-2590401008-22-1690407430-36-3090413813-31-0590382032-22-1690388306-28-1890394733-11-2590401106-28-0690407534-16-0690413932-10-2490382125-31-2590388524-26-3690394906-20-1490401334-12-3890407738-20-1490414025-15-0590382227-05												
90381203-29-1590387607-21-1590394023-37-159040404-26-0490406827-09-1590413209-39-0590381338-20-2690387739-01-3590394114-04-3890400506-24-1490406931-37-1590413322-08-2690381412-14-2490387804-26-2090394204-10-1690400635-09-1590407039-09-1590413438-12-3490381510-00-0690387922-32-1090394300-10-1690400728-14-0090407109-11-0590413522-08-1490381626-12-2690388010-24-1090394424-14-3690400803-09-3590407210-36-0690413634-36-3090381714-24-3890388114-20-2690394528-10-2490400924-30-0490407332-38-2090413734-36-2290381828-06-3690388226-16-3090394614-04-2690401008-22-1690407430-36-3090413813-31-0590382032-22-1690388306-28-1890394733-11-2590401106-28-0690407534-16-0690413932-10-2490382032-22-1690388421-27-0590394816-30-0890401218-28-3490407621-39-0590414025-15-0590382125-31-2590388524-26-3690394906-20-1490401334-12-3890407738-20-1490414100-14-0490382227-05-												
90381338-20-2690387739-01-3590394114-04-3890400506-24-1490406931-37-1590413322-08-2690381412-14-2490387804-26-2090394204-10-1690400635-09-1590407039-09-1590413438-12-3490381510-00-0690387922-32-1090394300-10-1690400728-14-0090407109-11-0590413522-08-1490381626-12-2690388010-24-1090394424-14-3690400803-09-3590407210-36-0690413634-36-3090381714-24-3890388114-20-2690394528-10-2490400924-30-0490407332-38-2090413734-36-2290381828-06-3690388226-16-3090394614-04-2690401008-22-1690407430-36-3090413813-31-0590381906-16-0690388306-28-1890394733-11-2590401106-28-0690407534-16-0690413932-10-2490382032-22-1690388421-27-0590394816-30-0890401218-28-3490407621-39-0590414025-15-0590382125-31-2590388524-26-3690394906-20-1490401334-12-3890407738-20-1490414100-14-0490382227-05-1590388632-10-2090395020-06-1690401402-24-1890407818-20-0290414332-22-2890382330-00												
90381412-14-2490387804-26-2090394204-10-1690400635-09-1590407039-09-1590413438-12-3490381510-00-0690387922-32-1090394300-10-1690400728-14-0090407109-11-0590413522-08-1490381626-12-2690388010-24-1090394424-14-3690400803-09-3590407210-36-0690413634-36-3090381714-24-3890388114-20-2690394528-10-2490400924-30-0490407332-38-2090413734-36-2290381828-06-3690388226-16-3090394614-04-2690401008-22-1690407430-36-3090413813-31-0590381906-16-0690388306-28-1890394733-11-2590401106-28-0690407534-16-0690413932-10-2490382032-22-1690388421-27-0590394816-30-0890401218-28-3490407621-39-0590414025-15-0590382125-31-2590388524-26-3690394906-20-1490401334-12-3890407738-20-1490414100-14-0490382227-05-1590388632-10-2090395020-06-1690401402-24-1890407818-20-0290414214-00-0690382330-00-0690388703-33-1590395102-20-3490401534-20-0290407937-39-0590414332-22-2890382429-07												
90381510-00-0690387922-32-1090394300-10-1690400728-14-0090407109-11-0590413522-08-1490381626-12-2690388010-24-1090394424-14-3690400803-09-3590407210-36-0690413634-36-3090381714-24-3890388114-20-2690394528-10-2490400924-30-0490407332-38-2090413734-36-2290381828-06-3690388226-16-3090394614-04-2690401008-22-1690407430-36-3090413813-31-0590381906-16-0690388306-28-1890394733-11-2590401106-28-0690407534-16-0690413932-10-2490382032-22-1690388421-27-0590394816-30-0890401218-28-3490407621-39-0590414025-15-0590382125-31-2590388524-26-3690394906-20-1490401334-12-3890407738-20-1490414100-14-0490382227-05-1590388632-10-2090395020-06-1690401402-24-1890407818-20-0290414214-00-0690382330-00-0690388703-33-1590395102-20-3490401534-20-0290407937-39-0590414332-22-2890382429-07-2590388804-10-2090395226-12-1890401602-16-3890408036-26-1690414424-26-0090382510-28												
90381626-12-2690388010-24-1090394424-14-3690400803-09-3590407210-36-0690413634-36-3090381714-24-3890388114-20-2690394528-10-2490400924-30-0490407332-38-2090413734-36-2290381828-06-3690388226-16-3090394614-04-2690401008-22-1690407430-36-3090413813-31-0590381906-16-0690388306-28-1890394733-11-2590401106-28-0690407534-16-0690414025-15-0590382032-22-1690388421-27-0590394816-30-0890401218-28-3490407621-39-0590414025-15-0590382125-31-2590388524-26-3690394906-20-1490401334-12-3890407738-20-1490414100-14-0490382227-05-1590388632-10-2090395020-06-1690401402-24-1890407818-20-0290414214-00-0690382330-00-0690388703-33-1590395102-20-3490401534-20-0290407937-39-0590414332-22-2890382429-07-2590388804-10-2090395226-12-1890401602-16-3890408036-26-1690414424-26-0090382510-28-0690388925-35-0590395320-34-1690401712-38-1290408116-34-2490414516-22-08												
903817 14-24-38 903881 14-20-26 903945 28-10-24 904009 24-30-04 904073 32-38-20 904137 34-36-22 903818 28-06-36 903882 26-16-30 903946 14-04-26 904010 08-22-16 904074 30-36-30 904138 13-31-05 903819 06-16-06 903883 06-28-18 903947 33-11-25 904011 06-28-06 904075 34-16-06 904139 32-10-24 903820 32-22-16 903884 21-27-05 903948 16-30-08 904012 18-28-34 904076 21-39-05 904140 25-15-05 903821 25-31-25 903885 24-26-36 903949 06-20-14 904013 34-12-38 904077 38-20-14 904141 00-14-04 903822 27-05-15 903886 32-10-20 903950 20-06-16 904014 02-24-18 904078 18-20-02 904142 14-00-06 903823 30-00-06 903887 03-33-15 903951 02-20-34 904015 34-20-02 904079 37-39-05 904143												
903818 28-06-36 903882 26-16-30 903946 14-04-26 904010 08-22-16 904074 30-36-30 904138 13-31-05 903819 06-16-06 903883 06-28-18 903947 33-11-25 904011 06-28-06 904075 34-16-06 904139 32-10-24 903820 32-22-16 903884 21-27-05 903948 16-30-08 904012 18-28-34 904076 21-39-05 904140 25-15-05 903821 25-31-25 903885 24-26-36 903949 06-20-14 904013 34-12-38 904077 38-20-14 904141 00-14-04 903822 27-05-15 903886 32-10-20 903950 20-06-16 904014 02-24-18 904078 18-20-02 904142 14-00-06 903823 30-00-06 903887 03-33-15 903951 02-20-34 904015 34-20-02 904079 37-39-05 904143 32-22-28 903824 29-07-25 903888 04-10-20 903952 26-12-18 904016 02-16-38 904080 36-26-16 904144												
903819 06-16-06 903883 06-28-18 903947 33-11-25 904011 06-28-06 904075 34-16-06 904139 32-10-24 903820 32-22-16 903884 21-27-05 903948 16-30-08 904012 18-28-34 904076 21-39-05 904140 25-15-05 903821 25-31-25 903885 24-26-36 903949 06-20-14 904013 34-12-38 904077 38-20-14 904141 00-14-04 903822 27-05-15 903886 32-10-20 903950 20-06-16 904015 34-20-02 904078 18-20-02 904142 14-00-06 903823 30-00-06 903887 03-33-15 903951 02-20-34 904015 34-20-02 904079 37-39-05 904143 32-22-28 903824 29-07-25 903888 04-10-20 903952 26-12-18 904016 02-16-38 904080 36-26-16 904144 24-26-00 903825 10-28-06 903889 25-35-05 903953 20-34-16 904017 12-38-12 904081 16-34-24 904145												
903820 32-22-16 903884 21-27-05 903948 16-30-08 904012 18-28-34 904076 21-39-05 904140 25-15-05 903821 25-31-25 903885 24-26-36 903949 06-20-14 904013 34-12-38 904077 38-20-14 904141 00-14-04 903822 27-05-15 903886 32-10-20 903950 20-06-16 904014 02-24-18 904078 18-20-02 904142 14-00-06 903823 30-00-06 903887 03-33-15 903951 02-20-34 904015 34-20-02 904079 37-39-05 904143 32-22-28 903824 29-07-25 903888 04-10-20 903952 26-12-18 904016 02-16-38 904080 36-26-16 904144 24-26-00 903825 10-28-06 903889 25-35-05 903953 20-34-16 904017 12-38-12 904081 16-34-24 904145 16-22-08												
903821 25-31-25 903885 24-26-36 903949 06-20-14 904013 34-12-38 904077 38-20-14 904141 00-14-04 903822 27-05-15 903886 32-10-20 903950 20-06-16 904014 02-24-18 904078 18-20-02 904142 14-00-06 903823 30-00-06 903887 03-33-15 903951 02-20-34 904015 34-20-02 904079 37-39-05 904143 32-22-28 903824 29-07-25 903888 04-10-20 903952 26-12-18 904016 02-16-38 904080 36-26-16 904144 24-26-00 903825 10-28-06 903889 25-35-05 903953 20-34-16 904017 12-38-12 904081 16-34-24 904145 16-22-08												
903822 27-05-15 903886 32-10-20 903950 20-06-16 904014 02-24-18 904078 18-20-02 904142 14-00-06 903823 30-00-06 903887 03-33-15 903951 02-20-34 904015 34-20-02 904079 37-39-05 904143 32-22-28 903824 29-07-25 903888 04-10-20 903952 26-12-18 904016 02-16-38 904080 36-26-16 904144 24-26-00 903825 10-28-06 903889 25-35-05 903953 20-34-16 904017 12-38-12 904081 16-34-24 904145 16-22-08												
90382330-00-0690388703-33-1590395102-20-3490401534-20-0290407937-39-0590414332-22-2890382429-07-2590388804-10-2090395226-12-1890401602-16-3890408036-26-1690414424-26-0090382510-28-0690388925-35-0590395320-34-1690401712-38-1290408116-34-2490414516-22-08												
903825 10-28-06 903889 25-35-05 903953 20-34-16 904017 12-38-12 904081 16-34-24 904145 16-22-08	903823		903887		903951	02-20-34	904015				904143	
903826 22-12-30 903890 30-04-14 903954 07-09-35 904018 24-02-16 904082 28-14-32 904146 00-18-36												
	903826	22-12-30	903890	30-04-14	903954	07-09-35	904018	24-02-16	904082	28-14-32	904146	00-18-36

)	004447	00 10 00 1	004040		004070	10.00.04
	904147	26-16-26	904210	09-19-05	904273	16-02-24
	904148	02-12-18	904211	08-18-28	904274	38-28-34
	904149	14-36-06	904212	11-25-35	904275	24-30-24
	904150	38-12-26	904213	12-22-04	904276	23-01-35
	904151	08-38-08	904214	21-31-05	904277	28-18-08
	904152	24-02-12	904215	04-34-28	904278	30-04-10
	904153	34-24-06	904216	32-14-00	904279	22-24-18
	904154	10-32-06	904217	20-02-20	904280	08-22-04
	904155	19-01-15	904218	08-18-00	904281	14-04-18
	904156	14-24-02	904219	34-12-30	904282	22-00-22
	904157	16-34-00	904220	22-08-38	904283	20-30-24
	904158	32-10-04	904221	18-32-14	904284	14-04-10
	904159	06-16-26	904222	20-06-24	904285	08-14-20
	904160	28-14-36	904223	29-31-25	904286	26-16-34
	904161	36-18-36	904224	14-36-18	904287	20-02-24
	904162	02-28-10	904225	02-28-02	904288	22-04-18
	904163	34-08-26	904226	24-10-00	904289	22-00-06
	904164	26-04-14	904227	20-22-32	904290	37-07-25
	904165	38-24-02	904228	39-09-35	904291	37-19-05
	904166	38-16-06	904229	32-02-36	904292	30-08-14
	904167	16-18-28	904230	16-18-32	904293	02-16-02
	904168	38-24-10	904231	34-00-34	904294	08-34-12
	904169	14-00-10	904232	37-11-05	904295	18-04-38
	904170	34-04-10	904233	30-32-22	904296	22-00-18
	904171	08-30-24	904234	38-00-10	904297	08-22-08
	904172		904234	04-18-24	904297	06-22-00
		04-30-20				
	904173	06-28-34	904236	02-20-02	904299	39-17-35
	904174	12-30-00	904237	06-32-22	904300	02-04-10
	904175	30-32-38	904238	18-04-14	904301	12-30-20
	904176	38-00-14	904239	10-20-38	904302	38-20-34
	904177	00-26-36	904240	23-29-15	904303	36-06-28
	904178	16-34-08	904241	04-14-36	904304	04-30-04
	904179	32-34-24	904242	34-08-34	904305	38-08-30
	904180	12-26-00	904243	32-18-24	904306	02-08-30
	904181	16-38-32	904244	28-02-08	904307	33-11-05
	904182	30-36-22	904245	14-28-38	904308	37-11-25
	904183	20-06-00	904246	36-06-20	904309	39-13-35
	904183	26-00-10	904240 904247	26-08-02	904309 904310	27-17-35
				20-06-02 38-04-26		
	904185	08-30-08	904248		904311	28-02-24
	904186	39-29-15	904249	14-24-34	904312	22-08-18
	904187	06-36-06	904250	22-28-02	904313	26-04-26
	904188	16-18-04	904251	32-02-08	904314	32-14-36
	904189	12-18-32	904252	32-18-12	904315	13-39-25
	904190	14-20-02	904253	02-04-18	904316	10-00-30
	904191	38-24-06	904254	15-05-35	904317	00-18-04
	904192	34-36-18	904255	26-08-30	904318	36-18-24
	904193	22-28-34	904256	14-16-10	904319	14-16-38
	904194	10-32-38	904257	32-38-24	904320	09-39-25
	904195	22-36-26	904258	08-38-16	904321	32-34-28
	904196	30-20-38	904259	08-22-36	904322	05-15-05
			904259 904260	06-32-26	904322	31-05-35
	904197	06-28-10				
	904198	30-32-14	904261	28-02-20	904324	28-14-28
	904199	14-32-14	904262	28-38-24	904325	28-18-36
	904200	08-34-20	904263	27-33-15	904326	32-06-32
	904201	02-08-22	904264	02-16-30	904327	05-19-05
	904202	01-19-05	904265	24-10-28	904328	14-00-26
	904203	22-36-06	904266	14-28-18	904329	12-34-00
	904204	16-06-16	904267	28-34-04	904330	21-03-25
\frown	904205	07-29-15	904268	36-38-32	904331	16-38-08
	904206	18-24-38	904269	19-33-15	904332	29-39-25
	904200 904207	24-34-00	904209 904270	33-39-05	904332 904333	29-39-23
	904207 904208	28-18-24	904270 904271	38-08-14	904333 904334	29-11-15
			904271 904272			
	904209	32-38-28	JU4212	00-02-28	904335	09-19-25
		I		I		

National Auto Lock Service, Inc.

• LARGEST SELECTION OF TRANSPONDER KEYS:

- FACTORY ORIGINALS
- A1 SECURITY
- Ilco
- Jet
- NATIONAL
- STRATTEC

HIGH SECURITY SPACE & DEPTH GUIDE KEYS:

- AUDI, BMW, GTO, HONDA
- Lexus, Mazda, Mercedes
- ROVER, SAAB, VOLVO

• T-Code USA Software & Accessories:

- SPECIALIZED CABLES
- SOFTWARE INTEGRATION
- TECHNICAL MANUALS:
 - DATA MANAGEMENT
 - DESIGN
 - INTEGRATION
 - LAYOUT
 - PRINT PUBLICATIONS

AUTOMOTIVE SOFTWARE SOLUTIONS:

- AUTOSMART ADVISOR
- MAZDA PIN
- MEGA CODES
- NISSAN SUPER CODES

R & D CENTER - AUTOMOTIVE TECHNOLOGIES:

- AUTOMOTIVE CHIP CIRCUITS
- DATA SIMULATOR SYSTEMS
- IMMOBILIZER TRANSPONDERS
- R F I D

Home of Original Ideas & Thought

Sales Line: 1-800-954-5454 Web: www.Laserkey.com

Circle 286 on Rapid Reply July 2005 • 137

904336	29-15-05	904399	22-32-14	904462	24-14-32	904525	02-16-06	904588	36-26-32	904651	06-36-22
904330 904337	00-22-32	904399 904400	28-06-00	904462	24-14-32 06-20-06	904525	18-28-06	904589	26-28-14	904652	06-32-14
904338	38-12-18	904401	02-24-14	904464	14-16-30	904527	16-22-16	904590	26-36-18	904653	09-15-05
904339	26-34-22	904402	02-28-16	904465	24-30-36	904528	35-25-15	904591	26-28-22	904654	36-14-36
904340	26-36-30	904403	22-04-30	904466	06-12-22	904529	21-23-05	904592	22-04-10	904655	06-20-26
904341	04-30-36	904404	05-31-25	904467	14-28-14	904530	20-34-20	904593	12-26-32	904656	18-04-22
904342	31-13-35	904405	09-15-25	904468	38-08-02	904531	24-30-16	904594	30-08-02	904657	24-30-36
904343	20-38-04	904406	04-26-00	904469	30-20-10	904532	34-16-34	904595	32-10-16	904658	06-12-22
904344	18-04-10	904407	10-28-18	904470	26-04-30	904533	02-12-38	904596	29-19-05	904659	14-28-14
904345	20-34-24	904408	28-18-04	904471	06-32-18	904534	16-18-00	904597	00-18-12	904660	38-08-02
904346	26-00-30	904409	20-38-08	904472	32-10-36	904535	14-00-18	904598	18-36-10	904661	30-20-10
904347	04-10-00	904410	19-05-15	904473	04-34-20	904536	38-12-02	904599	18-36-06	904662	26-04-30
904348	14-32-02	904411	28-02-32	904474	35-09-35	904537	34-20-14	904600	02-24-30	904663	06-32-18
904349	02-32-22	904412	02-12-02	904475	20-02-35	904538	10-00-14	904601	28-30-04	904664	32-10-36
904350	28-34-00	904413	00-22-28	904476	16-26-04	904539	38-04-22	904602	12-18-04	904665	04-34-20
904351	04-06-36	904414	32-06-00	904477	28-14-20	904540	13-03-25	904603	00-14-20	904666	35-09-35
904352	14-04-22	904415	14-36-02	904478	00-02-24	904541	26-36-06	904604	19-09-35	904667	20-02-36
904353	32-22-00	904416	02-16-22	904479	36-14-00	904542	34-04-22	904605	08-14-32	904668	16-26-04
904354	33-35-05	904417	33-15-05	904480	08-14-00	904543	04-26-36	904606	36-18-08	904669	28-14-20
904355	07-33-15	904418	38-24-38	904481	36-06-00	904544	00-30-12	904607	22-36-02	904670	00-02-24
904356	36-18-32	904419	24-38-20	904482	38-28-14	904545	16-02-08	904608	22-32-22	904671	36-14-00
904357	00-18-00	904420 904421	11-29-15 22-24-06	904483 904484	10-32-26	904546	10-00-10	904609	20-10-32	904672	08-14-00
904358 904359	10-16-34 18-20-30	904421 904422	22-24-06 24-02-36	904484	24-02-24	904547 904548	06-28-02 38-04-38	904610 904611	20-34-08	904673 904674	36-06-00
904359 904360	26-36-10	904422 904423	24-02-36 24-10-16	904485 904486	06-12-02 14-16-06	904548	38-04-38 02-08-34	904611	16-34-28 02-28-38	904674 904675	38-28-14 10-32-26
904360 904361	26-36-02	904423 904424	08-10-10	904480	30-12-26	904549	24-38-16	904612	10-20-34	904075 904676	24-02-24
904361 904362	10-24-18	904424 904425	14-00-34	904487	26-32-06	904550	32-10-28	904613	38-16-30	904070 904677	06-12-02
904363 904363	29-11-05	904425	20-22-36	904489	20-32-00 34-20-06	904552	08-34-08	904615	22-28-14	904678	14-16-06
904364	32-10-00	904427	08-22-32	904490	30-16-34	904553	36-38-28	904616	06-32-10	904679	30-12-26
904365	28-14-04	904428	16-30-36	904491	17-31-05	904554	30-36-06	904617	18-04-18	904680	26-32-06
904366	08-30-20	904429	32-22-32	904492	14-32-22	904555	38-20-38	904618	36-22-16	904681	03-09-15
904367	36-02-12	904430	23-29-35	904493	38-24-30	904556	00-26-20	904619	24-26-32	904682	26-12-38
904368	20-30-08	904431	36-18-28	904494	30-04-30	904557	24-34-28	904620	27-09-15	904683	16-06-20
904369	02-24-38	904432	05-15-25	904495	29-15-25	904558	30-32-10	904621	31-37-15	904684	22-00-26
904370	14-00-14	904433	16-06-36	904496	12-02-32	904559	00-10-28	904622	39-09-15	904685	12-30-12
904371	36-10-24	904434	34-08-23	904497	02-12-34	904560	16-18-24	904623	09-11-05	904686	06-12-38
904372	18-04-30	904435	18-36-02	904498	28-38-32	904561	26-00-14	904624	10-36-06	904687	08-14-04
904373	10-24-30	904436	15-25-15	904499	09-31-05	904562	32-10-32	904625	32-38-20	904688	14-28-06
904374	34-36-06	904437	07-21-35	904500	22-12-26	904563	18-24-18	904626	30-36-30	904689	04-34-00
904375	24-30-00	904438	16-30-00	904501	02-16-10	904564	32-06-36	904627	34-16-06	904690	30-00-34
904376	00-02-32	904439	12-38-08	904502	22-24-30	904565	08-10-16	904628	21-39-05	904691	36-14-24
904377	06-20-38	904440	02-32-14	904503	34-24-14	904566	04-18-12	904629	38-20-14	904692	32-34-04
904378	22-24-14	904441	22-04-22	904504	34-08-14	904567	28-34-08	904630	18-20-02	904693	24-34-04
904379	12-26-08	904442	22-08-02	904505	22-08-30	904568	30-16-10	904631	37-39-05	904694	02-24-02
904380 904381	10-16-26 22-08-34	904443 904444	16-34-16 18-24-30	904506 904507	12-38-32	904569 904570	18-08-18	904632 904633	36-26-16 18-28-38	904695 904696	06-12-18 32-02-20
904381 904382	22-06-34 38-20-10	904444 904445	38-12-06	904507 904508	34-16-22 24-14-20	904570	38-16-10 06-12-30	904633	08-10-24	904696 904697	17-35-26
904382 904383	00-30-24	904445 904446	20-26-00	904508 904509	00-30-04	904572	34-16-02	904635	08-22-12	904698 904698	30-08-38
904384	35-01-35	904447	28-10-28	904510	25-07-25	904572	14-16-26	904636	36-38-24	904699	36-06-24
904385	15-33-15	904448	26-32-02	904511	18-00-10	904574	02-24-34	904637	10-20-06	904700	15-29-15
904386	34-08-30	904449	14-04-14	904512	28-30-16	904575	06-24-02	904638	10-20-30	904701	19-29-15
904387	24-38-28	904450	12-02-08	904513	10-32-10	904576	26-32-10	904639	20-06-28	904702	10-12-22
904388	38-28-38	904451	00-18-08	904514	12-27-05	904577	18-24-06	904640	08-10-36	904703	34-04-34
904389	27-01-35	904452	20-02-32	904515	26-32-26	904578	08-38-12	904641	10-12-26	904704	21-11-05
904390	32-18-28	904453	03-13-35	904516	12-38-04	904579	09-35-05	904642	36-22-32	904705	38-12-30
904391	18-20-26	904454	04-10-04	904517	29-35-25	904580	12-14-28	904643	01-15-25	904706	02-24-06
904392	36-26-36	904455	01-15-05	904518	04-22-36	904581	00-10-32	904644	37-15-25	904707	28-10-32
904393	18-08-14	904456	38-16-22	904519	12-02-36	904582	02-12-30	904645	38-28-06	904708	14-20-06
904394	30-36-10	904457	30-08-18	904520	02-32-02	904583	02-20-06	904646	29-03-25	904709	20-26-16
904395	32-38-04	904458	06-16-38	904521	02-24-10	904584	08-10-04	904647	00-14-32	904710	18-28-18
904396	20-02-16	904459	13-39-05	904522	36-22-04	904585	27-01-15	904648	30-04-38	904711	08-34-24
904397	19-37-15	904460	08-34-04	904523	36-10-20	904586	12-38-24	904649	16-34-04	904712	34-00-14
904398	32-06-20	904461	16-21-35	904524	34-12-02	904587	26-12-22	904650	06-08-30	904713	22-12-22
	TTI		17			I		I			

Join the... NATIONAL LOCKSMITH AUTOMOBILE ASSOCIATION

...take the fear out of automotive locksmithing!

FREE GIFTS

HIL





Receive all the one year gifts, PLUS a free Flashlight Tool Kit, containing a small set of tools including an Emergency Pick Set.

AutoEdge software with over 1400 pages of automotive locksmithing details, plus two FREE books on foreign and domestic autos totalling over 400 pages. Plus receive an NLAA membership card, photo ID and NLAA bond.



When you become a member of NLAA you receive instant benefits that help you make more money. We'll give you the edge on car work. You'll receive our monthly news magazine called the *Automotive Edge*, and it's jammed full of photos and step-by-step instructions on how to do locksmith work on the newest vehicles.

- · Learn how to open the car in a lockout
- Remove the locks from the car
- · Find the key codes
- Make a key to the doors and ignition when the original is lost
- · Cut car keys using hidden codes
- · Pull the steering wheel
- Program and cut transponder keys

YES! Please sign me up for the NLAA Membership and send me the free stuff, plus Membership Certificate, \$10,000 Bond and Newsletters.

Two Year Membership @ \$240.00 with Automotive Locksmith Software, 2 Books, Certificate, \$10,000 Bond and Tool Kit! (Two Year Membership Outside the U.S. \$290.00)

One Year Membership @ \$125.00 with Automotive Locksmith Software, 2 Books, Certificate, \$10,000 Bond. (One Year Membership Outside the U.S. \$150.00)

Memberships must be paid in U.S. funds.

Select payment Method:
Check VISA MasterCard Discover

American Express D Money Order

Payment Total	17		
Card Number		Exp. Date	2
Signature (required)			
Name			
Shop Name			1
Address (no PO. boxes) _			
City	State	Zip	
Phone			
E-Mail (optional)			

Copy or clip this coupon and send with payment to:

The National Publishing Co. • 97592 Eagle Way • Chicago, Illinois 60678-9750

OR fax credit card orders to (630) 837-1210

Continued from page 138 Master, Part 2 (Combination Lock) 900001-907353

											()
904714	09-35-25	904778	03-21-15	904842	34-08-22	904906	24-02-16	904970	12-38-24	905034	12-26-16
904715	38-20-02	904779	07-13-35	904843	18-36-02	904907	36-10-32	904971	26-12-22	905035	14-16-22
904716	30-04-34	904780	14-24-30	904844	15-25-15	904908	20-10-20	904972	36-26-32	905036	16-34-20
904717	32-38-08	904781	13-35-25	904845	07-21-35	904909	32-14-28	904973	26-28-14	905037	06-08-34
904718	11-13-35	904782	08-30-04	904846	16-30-00	904910	16-02-28	904974	26-36-18	905038	02-20-38
904719	28-30-00	904783	36-38-12	904847	12-38-08	904911	22-28-38	904975	26-28-22	905039	05-31-05
904720	20-10-00	904784	20-02-12	904848	02-32-14	904912	26-28-02	904976	22-04-10	905040	36-02-24
904721	08-26-08	904785	04-26-08	904849	20-38-24	904913	06-12-26	904977	12-26-32	905041	16-06-32
904722	34-08-18	904786	24-26-12	904850	02-04-30	904914	04-30-00	904978	30-08-02	905042	05-11-05
904723	26-28-10	904787	18-36-18	904851	10-12-18	904915	28-10-00	904979	32-10-16	905043	18-24-14
904724	17-39-05	904788	10-36-14	904852	20-38-12	904916	06-36-14	904980	29-19-05	905044	09-31-25
904725	28-30-08	904789	19-25-15	904853	38-24-34	904917	34-20-30	904981	00-18-12	905045	28-06-16
904726	38-20-06	904790	00-10-00	904854	08-14-36	904918	10-16-06	904982	18-36-10	905046	02-28-14
	10-36-02		12-38-16		00-30-08		22-00-10				
904727		904791		904855		904919		904983	18-36-06	905047	23-01-15
904728	14-28-34	904792	12-30-24	904856	38-00-22	904920	16-38-04	904984	02-24-30	905048	05-19-25
904729	02-16-26	904793	30-00-22	904857	39-05-35	904921	02-08-38	904985	28-30-04	905049	38-28-22
904730	00-30-20	904794	00-10-24	904858	16-06-00	904922	14-28-02	904986	12-18-04	905050	15-05-15
904731	38-16-02	904795	36-38-04	904859	10-28-02	904923	14-32-38	904987	00-14-20	905051	36-10-36
904732	36-02-16	904796	11-17-35	904860	04-18-36	904924	05-27-05	904988	19-09-35	905052	18-32-22
904733	04-22-08	904797	04-34-12	904861	12-22-00	904925	38-08-34	904989	08-14-32	905053	18-20-06
904734	28-06-28	904798	16-22-00	904862	20-22-08	904926	04-18-08	904990	36-18-08	905054	25-03-25
904735	04-10-24	904799	10-36-26	904863	17-19-05	904927	08-14-24	904991	22-36-02	905055	10-16-22
904736	14-00-30	904800	04-30-24	904864	04-22-00	904928	04-22-12	904992	22-32-22	905056	12-14-20
904737	27-14-35	904801	24-10-04	904865	37-23-05	904929	24-14-24	904993	00-26-36	905057	00-14-08
	20-10-04										
904738		904802	35-25-35	904866	34-24-18	904930	20-38-32	904994	16-34-08	905058	36-22-28
904739	20-06-20	904803	00-26-12	904867	12-14-04	904931	12-26-04	904995	32-34-24	905059	10-28-34
904740	21-35-05	904804	09-39-05	904868	38-00-34	904932	12-30-04	904996	12-26-00	905060	32-22-36
904741	14-28-10	904805	22-08-26	904869	16-06-28	904933	20-34-04	904997	16-38-32	905061	24-38-04
904742	28-38-12	904806	38-12-34	904870	36-02-20	904934	32-18-00	904998	30-36-22	905062	28-34-12
904743	04-06-20	904807	22-08-14	904871	22-28-10	904935	02-04-34	904999	20-06-00	905063	08-22-28
904744	26-28-18	904808	34-36-30	904872	04-26-12	904936	26-00-18	905000	26-00-10	905064	06-08-26
904745	18-04-34	904809	34-36-22	904873	06-36-30	904937	26-16-22	905001	08-30-08	905065	22-28-22
904746	36-14-28	904810	13-31-05	904874	32-22-08	904938	22-12-02	905002	39-29-15	905066	06-36-10
904747	35-21-35	904811	32-10-24	904875	38-04-14	904939	11-01-15	905003	06-36-06	905067	23-09-35
904748	09-23-05	904812	25-15-05	904876	04-10-32	904940	32-38-16	905004	16-18-04	905068	36-10-28
904749	20-06-32	904813	00-14-04	904877	28-10-36	904941	10-32-18	905005	12-18-32	905069	34-00-10
904750	16-38-20	904814	14-00-06	904878	34-04-26	904942	34-36-02	905006	14-20-02	905070	10-00-18
904751	06-20-02	904815	32-22-28	904879	28-30-36	904943	25-11-25	905007	38-24-06	905071	12-34-16
904752	08-18-04	904816	24-26-00	904880	22-24-38	904944	30-00-14	905008	34-36-18	905072	38-08-26
			16-22-08		37-03-25						
904753	18-32-02	904817		904881		904945	18-36-26	905009	22-28-34	905073	30-00-18
904754	23-05-15	904818	00-18-36	904882	08-26-16	904946	00-02-16	905010	10-32-38	905074	02-28-06
904755	21-11-25	904819	26-16-26	904883	18-00-22	904947	12-38-20	905011	22-36-26	905075	08-18-36
904756	30-12-38	904820	02-12-18	904884	36-22-00	904948	10-24-38	905012	30-20-38	905076	09-27-05
904757	12-02-12	904821	14-36-06	904885	26-08-18	904949	12-22-08	905013	06-28-10	905077	03-05-15
904758	06-36-26	904822	38-12-26	904886	12-22-32	904950	36-14-08	905014	30-32-14	905078	14-20-38
904759	22-00-30	904823	08-38-08	904887	20-30-04	904951	26-36-14	905015	14-32-14	905079	26-16-06
904760	28-34-28	904824	24-02-12	904888	14-20-30	904952	18-00-14	905016	08-34-20	905080	00-22-08
904761		904825		904889		904953	04-14-20	905017		905081	
	16-22-28		33-15-05		08-18-24				26-28-38		39-21-15
904762	16-30-12	904826	38-24-38	904890	00-26-16	904954	28-02-36	905018	29-35-05	905082	30-36-02
904763	18-32-26	904827	24-38-20	904891	34-36-26	904955	00-04-26	905019	22-36-18	905083	24-26-04
904764	33-39-25	904828	11-29-15	904892	28-38-04	904956	22-12-18	905020	26-00-22	905084	03-29-15
904765	30-20-26	904829	22-24-06	904893	26-04-38	904957	20-06-36	905021	30-12-18	905085	38-20-26
904766	38-16-34	904830	24-02-36	904894	30-08-26	904958	04-06-24	905022	06-36-02	905086	12-14-24
904767	38-00-18	904831	24-10-16	904895	00-10-04	904959	36-02-08	905023	01-19-25	905087	10-00-06
904768	14-24-14	904832	08-10-20	904896	30-36-18	904960	28-06-20	905024	28-18-28	905088	26-12-26
904769	15-37-15	904833	14-00-34	904897	24-30-04	904961	30-32-06	905025	06-24-18	905089	06-08-22
904770	03-25-15	904834	20-22-36	904898	08-22-16	904962	34-00-22	905026	10-36-30	905090	32-18-32
904771	04-18-32	904835	08-22-32	904899	06-28-06	904963	01-23-05	905027	38-00-30	905091	36-14-32
904772	00-10-20	904836	16-30-36	904900	18-28-34	904964	18-36-14	905028	34-24-38	905092	29-19-25
904773	11-21-35	904837	32-22-32	904901	34-12-38	904965	14-04-34	905029	30-16-30	905093	27-29-35
904774	35-05-35	904838	23-29-35	904902	02-24-18	904966	04-10-28	905030	26-12-34	905094	12-34-04
904775	16-02-12	904839	36-18-28	904903	34-20-02	904967	34-12-06	905031	14-36-14	905095	06-36-18
904776	26-08-34	904840	05-15-25	904904	02-16-38	904968	36-14-20	905032	12-18-00	905096	36-06-12
904777	38-28-18	904841	16-06-36	904905	12-38-12	904969	27-01-15	905033	11-01-35	905097	34-20-10
	T T A	CT1		4 4.4					_		

For years locksmiths have begged for comprehensive service manuals on motorcycles, and they are finally here! Covering a wide range of service procedures, you'll know everything a locksmith needs to know about each cycle. Plus, you'll get step by step photographs and instructions.



The National Locksmith® Guide To Motorcycles Volumes 1, 2, 3, 4 & 5 by John Blankenship

Volume 1 covers... Key information • Progression Charts • BMW 1997 R1100R • Harley-Davidson 1938 Knucklehead, 1970 Sportster, 1980 Sportster, 1984 Wide Glide, 1994 + Tubular Ignition Lock • Honda 1968 Mini Trail 50, 1970 Trail 90, 1971 CB750, 1978 CB750, 1978 Hawk, 1981 CB900, 1982 Ascot, 1983 Shadow, 1984 Nighthawk, 1985 Rebel, 1990 Gold Wing, 1996 Nighthawk 750, 1996 VFR750 • Kawasaki 1980 UTD250, 1985 Ninja 600, 1993 KLX650 Ignition Lock, 1994 Ninja Gas Cap • Neiman Steering Lock • Suzuki 1986 Intruder, 1990 Katana 600, 1991 GSXR1100 Ignition Lock, 1998 Katana 600, 1999 TL1000R • Triumph 1995 Tiger, 1999 Legend • Yamaha 1980 650 Twin, 1987 FZR1000 Ignition Lock, 1987 Virago, 1992 Yamaha/Polaris 4-Wheeler Ignition Lock, 1998 V Star Classic, 1998 YZF600R

Volume 2 covers... Key information • Progression Charts • BMW 1976 R90/6, 1989 K100RS, 1995+ Ignition Lock, 1999 F650, Luggage using Y61 • Buell 2000 Blast • Ducati 1993 Monster • Harley-Davidson 1999 Road King Police, 1999 Sportster • Honda 1975 CB550 Ignition Lock, 1980 CB400 Ignition Lock, 1983 CB650 Ignition Lock, 1985 Aero Ignition Lock, 1995 Gold Wing Luggage, 1987 250X 4-Wheeler, 1990 NS50, 1992 Shadow, 1994 CB250, 1997 Shadow, 1998 CBR1100XX, 1999 CBR600F4, 1999 CBRX1100XX, 1999 Shadow, 2000 CBR600F4, LIPO 5-cut Ignition Lock, LIPO 8-cut Ignition Lock, • Kawasaki 7-cut Code Information, 1980 LTD250 Ignition Lock, 1983 GPZ Ignition Lock, 1986 ZX600R Gas Cap, 1986 ZX600R Ignition Lock, 1987 EX500 Ignition Lock, 1989 EX500, 1991 ZX-6, New Blank • Suzuki 1968 T500, 1981 GS550 Ignition Lock, 1986 GSXR750RG Gas Cap, SM-2 Ignition Lock, SM-4 Ignition Lock • Triumph 1970 Bonneville, 1973 Tiger, • Yamaha 1980 XS650, 1982 Seca 400, 1982 XV920 Ignition Lock, 1984 F1600, 1986 F11200 Gas Cap, 1989 Riva Jog Ignition Lock, 1990 XT350, 1993 Seca II, 1996 Royal Star, Cruiser Ignition Lock • Zadi Q637 Ignition Lock, Q933 Ignition Lock

Volume 3 covers... Key information • Progression Charts • BMW 1999 R1100GS, Luggage using X59 • Honda 1975 CB500T Ignition Lock, 1980 CB750 Custom Ignition Lock, 1980 CM400T, 1983 CB450 Nighthawk Ignition Lock, 1985 Big Red, 1987 Elite 250, 1987 Elite 250, 1997 CBR600F3, 1999 Shadow ACE Deluxe, 2001 CBR1100XX, 2001 Gold Wing, 2001 XR100, 2002 VTX1800, Cruiser Ignition Lock • Kawasaki 1979+ Ignition Lock, 1982 KZ1000 Ignition Lock, 1986 ZL600 Ignition Lock, 1992 ZX6 Seat Lock, 1995 KLR250 Ignition Lock, 1998 ZX9R Ninja, 2000 Concours, 2001 250R Ninja, 2001 500R Ninja, 2001 KLR650, 2001 ZX12R Ninja, KM-5 Ignition Lock • Moto Gazzi 1979 V 50 II • Sazuki 1979 G5750 Ignition Lock, 1985 Ignition Lock, 1986 GSXR750, 1990 GSXR750, 1997 DR650, 1999 Savage, 2001 GSXR750, SM-5 Ignition Lock • Yamaha 1972 Enduro 100, 1977 Enduro 400, 1978 XS750 Triple, 1982 XZ550 Vision Ignition Lock, 1984 QT, 1989 V Max, 1992 TW200 Ignition Lock, 2002 BearTracker

Volume 4 covers... Master Index • Key information • Progression Charts • Corrections & Updates • Aprilia 2000 Pegaso, Luggage • Ducati 1991-2002 Ignition Lock, 1997 Monster, 2001 + Transponder Models, 2002 748 • Givi Luggage • Harley-Davidson 2002 Ultra Classic Electra Glide • Honda 1978 Trail 90, 1981 CB750 Gas Lock, 1984 V65 Sabre, 1986 VF1000R Interceptor, 1988 CT650 Hawk, 2001 VTR100F Super Hawk, 2002 + CBR954/1000 Key Blank, 2002 Metropolitan, 2002 Reflex, Honda 22222-00000 Codes, Honda H Codes, Honda T Codes, • Kawasaki 1973 Mach III Ignition Lock, 1980 KZ650, 1980 KZ1000-E2 Seat Lock, 1983 KZ750 LTD, 1995 GPZ1100, 2001 ZRX1200R, KM-2 Ignition Lock, KM-4 Ignition Lock • Malaguti 2002 Lock Set • Moto Guzzi 1973 V7 Sport • Suzuki 1999 King Quad, 2001 SV6505, 2002 GSXR600 • Triumph 2003 Bonneville T100 • Yamaha 1982 Virago, 1993 FZR600, 2002 FZ1, 2002 Vino

Volume 5 covers... Master Index • Key information • Progression Charts • Corrections & Updates • BMW 2000 FG650C, Cable Lock • Buell 2003 Firebolt XB9R • Cagiva 2000 Gran Canyon • Honda 1982 CX500, 1992 Nighthawk 750, 2003 CBR600RR, 2003 Shadow, 2004 Silver Wing, 2004 VTX1300. N, NA & NB Codes • Indian 2000 Chief • Kawasaki 1986 Bayou 185, 1999 Police 1000, 2001 Vulcan 1500 Classic, 2001 ZX6, Ignition Lock Using G8001-G9000 Codes, KM-8 Ignition Lock, Z5001-Z6000 Codes • KTM 2004 625 SXC • MZ 2004 125SM • Suzuki 1985 GV1200 Madura Ignition Lock, 2002 Intruder Volusia, 2003 Burgman Scooters, 2004 Marauder 1600 Ignition Lock, 2005 Boulevard M95 Ignition Lock • SYM Shark 125 Scooter Lock Set • Triumph 1966 TR6 Steering Lock, 1998 Thunderbird Sport • Vespa 1984-1991 PX150E Compartment Lock • Yamaha 1987 FZ600, 1989 Riva 200Z, 1991 Seca II, 2000 V Max, 2002 YZF R6, 2004 XT225, YM-8 Ignition Lock

Buy all 5 volumes in the online store! TheNationalLocksmith.com

 Any Single Volume......\$99.00 + \$8 s/h
 I've enclosed a check or money order for \$.

 Any Two Volumes......\$149.00 + \$8 s/h
 OR charge my
 VISA

 Any Three Volumes\$199.00 + \$8 s/h
 Discover
 Discover

 Any Four Volumes\$249.00 + \$8 s/h
 Credit Card #
 Expiration Date

 All Five Volumes.....\$299.00 + \$8 s/h
 Signature
 Signature

Choose the Volumes you are ordering...

□ Vol. 1 □ Vol. 2 □ Vol. 3 □ Vol. 4 □ Vol. 5 □ Complete Set of All 5 Volumes

Please choose a format: Book CD-ROM

(U.S. add \$8 s/h per order. Foreign & Canada add \$20 s/h per order. Orders must be paid in U.S. funds)

i ve enclosed a cite		CLUD SHELL BE THE REPORT OF TH	
OR charge my	🗖 VISA	MasterCard	
	Discover	American Express	
Credit Card #			
Signature			
Shop Name			
City			
		_ Zip	
Phone ()			

rcycles

orcycles

otorcycles

ycles

OID 6/05

Mail coupon & payment to: The National Publishing Co. • 97592 Eagle Way • Chicago, IL 60678-9750

Continued from page 140 Master, Part 2 (Combination Lock) 900001-907353

005000	04 04 00	005100	01 10 05	005000	00 10 00	005000	00.00.04		10 00 10		
905098	24-34-08	905162	01-19-05	905226	06-16-38	905290	00-26-04	905354	10-28-10	905418	17-35-05
905099	03-17-35 32-38-12	905163 905164	22-36-06 16-06-16	905227 905228	13-39-05 08-34-04	905291 905292	37-15-05 36-22-12	905355 905356	28-34-20 06-16-22	905419 905420	34-24-34 28-02-12
905100 905101	16-02-20	905164	07-29-15	905228	19-21-35	905292	30-22-12 32-34-16	905350	33-19-25	905420 905421	03-29-35
905101 905102	32-22-04	905165	18-24-38	905229	24-14-32	905293	17-23-05	905357	24-06-16	905421	12-18-36
905102 905103	32-22-04 31-01-15	905166	24-34-00	905230	24-14-32 06-20-06	905294	17-23-05	905358	24-06-16 18-32-18	905422 905423	20-26-08
905103 905104	16-06-24	905167	24-34-00 28-18-24	905231	14-16-30	905295	23-09-15	905360	18-24-10	905423	18-20-10
905104 905105	26-08-26	905168	20-10-24 32-38-28	905232	07-25-35	905296	23-09-15 12-34-12	905360	38-24-10 38-24-18	905424 905425	12-02-28
905105 905106	20-06-20 36-06-36	905109	09-19-05	905233	07-25-35	905297	23-13-35	905362	04-22-28	905425 905426	16-22-12
905108 905107	05-35-05	905170	09-19-03 08-18-28	905234	10-12-34	905298	23-13-35 09-11-25	905362	30-00-30	905420 905427	32-22-12
905107 905108	36-26-12	905171	11-25-35	905235	10-12-34	905299	38-24-14	905363	07-21-15	905427 905428	35-37-15
905108 905109	02-20-12	905172	12-22-04	905237	28-38-20	905301	30-32-02	905365	39-01-35	905429	33-07-25
905109	24-10-32	905173	21-31-05	905238	14-20-14	905302	05-07-25	905366	04-26-20	905430	24-02-28
905111	18-24-34	905175	04-34-28	905239	10-00-34	905303	04-26-16	905367	22-32-10	905431	30-04-26
905112	18-08-26	905176	32-14-00	905240	34-04-30	905304	04-20-10	905368	10-24-10	905432	26-12-30
905112	08-38-20	905177	20-02-20	905240	36-26-00	905305	34-16-26	905369	14-20-26	905433	12-34-08
905114	00-30-16	905178	08-18-00	905242	38-16-38	905306	16-26-20	905370	26-16-30	905434	26-04-34
905115	30-12-30	905179	34-12-30	905243	25-31-05	905307	16-38-28	905371	06-28-18	905435	14-24-06
905116	32-34-00	905180	22-08-38	905244	12-18-28	905308	26-28-06	905372	21-27-05	905436	31-21-35
905117	04-06-12	905181	18-32-14	905245	00-06-00	905309	22-28-06	905373	24-26-36	905437	25-35-25
905118	12-34-28	905182	20-06-24	905246	20-34-12	905310	10-20-10	905374	32-10-20	905438	01-31-05
905119	16-38-16	905183	29-31-25	905247	08-34-00	905311	18-00-34	905375	03-33-15	905439	02-04-14
905120	00-02-20	905184	14-36-18	905248	20-22-00	905312	00-26-00	905376	04-10-20	905440	14-36-26
905121	24-06-24	905185	22-04-38	905249	15-01-35	905313	34-00-06	905377	14-24-38	905441	04-22-32
905122	12-14-08	905186	28-02-16	905250	32-02-28	905314	26-16-02	905378	28-06-36	905442	12-26-20
905123	36-26-20	905187	38-28-10	905251	31-33-15	905315	22-24-34	905379	06-16-06	905443	31-21-15
905124	36-18-00	905188	22-12-38	905252	28-18-32	905316	12-26-12	905380	32-22-16	905444	24-38-12
905125	18-20-34	905189	16-38-12	905253	30-12-02	905317	00-30-00	905381	25-31-25	905445	22-32-38
905126	20-38-28	905190	20-22-28	905254	08-38-32	905318	10-24-34	905382	27-05-15	905446	38-08-38
905127	34-12-26	905191	28-06-32	905255	04-14-28	905319	04-18-04	905383	30-00-06	905447	39-29-35 ()
905128	34-36-10	905192	10-36-10	905256	04-14-00	905320	24-34-20	905384	29-07-25	905448	32-06-12
905129	20-34-00	905193	14-36-10	905257	20-34-24	905321	10-36-22	905385	10-28-06	905449	12-38-28
905130	02-32-38	905194	08-38-24	905258	26-00-30	905322	08-14-08	905386	22-12-30	905450	22-32-06
905131	22-24-02	905195	28-30-24	905259	04-10-00	905323	26-16-38	905387	32-14-24	905451	16-26-12
905132	31-09-35	905196	25-39-05	905260	14-32-02	905324	04-26-04	905388	12-22-16	905452	10-16-10
905133	13-19-05	905197	01-31-25	905261	02-32-22	905325	06-24-14	905389	20-22-16	905453	24-06-00
905134	26-12-06	905198	19-25-35	905262	28-34-00	905326	35-09-15	905390	36-38-16	905454	06-28-38
905135	35-21-15	905199	16-30-04	905263	04-06-36	905327	28-14-00	905391	05-35-25	905455	25-15-25
905136	24-06-12	905200	12-14-00	905264	14-04-22	905328	22-09-35	905392	14-24-18	905456	18-00-30
905137	18-00-26	905201	30-16-02	905265	32-22-00	905329	16-02-24	905393	36-14-04	905457	18-08-38
905138	20-22-12	905202	04-30-16	905266	33-35-05	905330	38-28-34	905394	08-30-00	905458	34-20-38
905139	06-32-06	905203	08-30-16	905267	07-33-15	905331	24-30-24	905395	14-04-30	905459	36-10-04
905140	24-34-16	905204	08-26-32	905268	36-18-32	905332	23-01-35	905396	13-35-05	905460	32-14-08
905141	15-21-15	905205	26-00-06	905269	00-18-00	905333	28-18-08	905397	30-08-30	905461	16-30-20
905142	02-04-38	905206	02-08-02	905270	10-16-34	905334	30-04-10	905398	30-20-14	905462	10-28-14
905143	18-28-22	905207	39-25-35	905271	18-20-30	905335	22-24-18	905399	00-22-16	905463	04-06-00
905144	22-12-06	905208	38-20-30	905272	26-36-10	905336	08-22-04	905400	20-02-28	905464	34-24-10
905145	06-28-22	905209	22-04-22	905273	26-36-02	905337	14-04-18	905401 905402	25-35-05	905465 905466	04-30-08
905146	36-10-16 17-27-05	905210	22-08-02	905274 905275	10-24-18	905338	22-00-22		30-04-14		22-36-22
905147 905148		905211	16-34-16	905275	29-11-05	905339	20-30-24	905403	19-29-35 28-30-12	905467	38-04-10
905148 905149	04-26-32 04-14-24	905212 905213	18-24-30 38-12-06	905276	32-10-00 28-14-04	905340 905341	14-04-10 08-14-20	905404 905405	18-32-10	905468 905469	10-20-14 14-31-10
905149 905150	14-32-26	905213	20-26-00	905277	08-30-20	905341	26-14-20	905405	14-16-34	905409 905470	39-21-35
905150 905151	32-34-08	905214	28-10-28	905279	36-02-12	905343	20-02-24	905400	03-25-35	905470	10-12-30
905152	12-18-08	905216	26-32-02	905280	20-30-08	905344	20-02-24	905407	16-18-12	905472	02-12-06
905152 905153	08-26-20	905210	20-32-02 14-04-14	905280	20-30-08 08-18-12	905344	22-04-18	905408	26-32-14	905472	34-20-14
905155 905154	00-20-20	905217	12-02-08	905282	28-38-16	905346	37-07-25	905410	00-06-20	905473	10-00-14
905154 905155	20-30-00	905218	00-18-08	905282	00-14-28	905340	37-07-23	905410	31-09-15	905474 905475	38-04-22
905156	21-35-25	905220	20-02-32	905284	22-36-30	905348	30-08-14	905412	14-28-22	905476	13-03-25
905150 905157	18-20-38	905220	03-13-35	905285	28-06-12	905349	02-16-02	905413	20-10-28	905477	26-36-06
905158	05-23-05	905222	04-10-04	905286	20-30-12	905350	08-34-12	905414	10-16-02	905478	34-04-22
905159	08-26-00	905223	01-15-05	905287	23-05-35	905351	18-04-38	905415	26-12-02	905479	04-26-36
905160	32-14-04	905224	38-16-22	905288	35-13-35	905352	22-00-18	905416	32-06-24	905480	00-30-12
905161	02-08-22	905225	30-08-18	905289	12-22-36	905353	00-14-24	905417	32-02-24	905481	16-02-08

Celebrating 20 years in business... With many years of experience!

We are proudly celebrating 20 years as a national distributor of door hardware products used in the door hardware, security, locksmith and architectural hardware industries. A special thank you to all of our customers who have truly made our success over the past 20 years possible.

JLM would like to recognize employees who are celebrating special anniversaries this year. We would also like to thank all our employees for their dedication and hard work.



Sharon Lause - Sales - 15 Years

Sharon is a great gal who has helped many, many customers over the years. She is very dedicated to her job and knows her stuff. Sharon enjoys doing remodeling work in her new home that she shares with her dog, Banjo.



Dennis Lemon - Warehouse Mgr. - 15 Years Dennis makes sure the warehouse is running smoothly. In his free time he enjoys golf and family vacations to Alabama. He is married and has a daughter. Dennis recently got eyeglasses so now your orders should be sent to the correct address!



Brian Dalgleish - Sales - 10 Years

Brian relocated from Michigan in 1999 to help start our North Carolina branch. He is now a custom to the warm climate to ever think about returning to Michigan. You may have seen him at some regional trade shows. Brian enjoys roller blading and golf.



Cheryl First - Sales - 10 Years

Cheryl is a very knowledgeable sales girl who wastes no time in doing her job. We like to call her "The Answer Lady" because she seems to know everything. She is married, has a son and 3 dogs.



Cathy McQueen - Accounting - 10 Years Cathy is the "Office Queen" who enjoys making sure everyone has what they need and the billing is correct. Don't try to get anything past her, she'll catch you! She has 2 grown daughters and a teenage son.



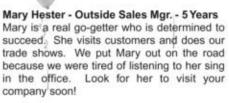


Bekki is a hard worker who is willing to go the extra mile for anyone. She makes sure that we have the highest demand items in stock. She also helps keep the guys in the warehouse in line! Bekki's son Josh occupies lots of her extra time.



Jennifer Guest - Graphic Design - 5 Years Jennifer is in charge of producing our binder. catalog and magazine ads. She also gets involved with the web site and updates prices. Jenn and her husband Bob have 2 daughters, Saleen (13) and Piper (3).





Dennis Ingamells - CPO - 5 Years Dennis is responsible for all of JLM's financial matters. We all count on him every other Thursday, pay-day! He and his wife Tamara have 2 daughters, Spencer & Raegan. He enjoys spending time with his family, golfing and fishing.

"Shake" Pepper - Outside Sales - 5 Years

Originally from Kansas City, Shake handles our outside sales and works out of our North Carolina branch. He and his wife Tina have 3 children, 10 year old Luke and 5 year old twins Morgan & Nicholas. Shake enjoys golf, Nascar, and spending time with his family.

Booth 500! Visit us at ALOA

Circle 241 on Rapid Reply



Midwest 800-522-2940



Security Door Hardware & Washroom Accessories

Online www.ilmwholesale.com



Southeast 800-768-6050

Continued from page 142 Master, Part 2 (Combination Lock) 900001-907353

005400	10 00 10	005540	00 1 1 00	005040	01 07 05	005074	00 10 10	005700	00 00 00	005000	00.00.40
905482	10-00-10	905546	28-14-32	905610	01-07-25	905674	38-16-10	905738	22-28-02	905802	00-06-16
905483	06-28-02	905547	00-06-12	905611	19-05-35	905675	06-12-30	905739	32-02-08	905803	18-24-02
905484	38-04-38	905548	26-08-38	905612	06-08-14	905676	34-16-02	905740	32-18-12	905804	00-22-04
905485	02-08-34	905549	10-32-14	905613	16-18-36	905677	14-16-26	905741	02-04-18	905805	10-24-02
905486	24-38-16	905550	24-06-36	905614	38-16-26	905678	02-24-34	905742	15-05-35	905806	11-33-15
905487	32-10-28	905551	20-30-16	905615	32-06-16	905679	06-24-02	905743	26-08-30	905807	23-33-15
905488	08-34-08	905552	06-08-18	905616	32-18-08	905680	26-32-10	905744	14-16-10	905808	04-34-24
905489	36-38-28	905553	00-22-12	905617	02-24-38	905681	18-24-06	905745	32-38-24	905809	15-01-15
905490	30-36-06	905554	06-16-30	905618	14-00-14	905682	08-38-12	905746	08-38-16	905810	15-17-35
905491	38-20-38	905555	21-31-25	905619	36-10-24	905683	09-35-05	905747	08-22-36	905811	06-32-02
905492	00-26-20	905556	14-20-10	905620	18-04-30	905684	12-14-28	905748	06-32-26	905812	08-10-28
905493	24-34-28	905557	24-38-24	905621	10-24-30	905685	00-10-32	905749	28-02-20	905813	30-20-02
905494	30-32-10	905558	20-26-12	905622	34-36-06	905686	02-12-30	905750	28-38-24	905814	06-20-10
905495	00-10-28	905559	06-08-02	905623	24-30-00	905687	02-20-06	905751	27-33-15	905815	16-30-24
905496	16-18-24	905560	28-18-00	905624	00-02-32	905688	08-10-04	905752	02-16-30	905816	10-00-26
905497	26-28-34	905561	33-19-05	905625	06-20-38	905689	23-25-15	905753	24-10-28	905817	28-34-16
905498	18-08-02	905562	00-22-36	905626	22-24-14	905690	34-22-08	905754	14-28-18	905818	36-02-32
905499	06-20-30	905563	36-06-32	905627	12-26-08	905691	18-08-34	905755	28-34-04	905819	34-24-02
905500	08-26-12	905564	06-32-38	905628	12-20-00	905692	34-12-34	905756	36-38-32	905820	38-04-30
			38-00-06		22-08-34		34-12-34 34-24-30		19-33-15		24-14-28
905501	12-18-24	905565		905629		905693		905757	33-39-05	905821	
905502	03-05-35	905566	10-00-22	905630	38-20-10	905694	16-26-32	905758		905822	32-34-12
905503	28-10-16	905567	28-30-20	905631	00-30-24	905695	14-32-18	905759	38-08-14	905823	24-10-24
905504	14-32-06	905568	10-12-02	905632	35-01-35	905696	24-30-12	905760	00-02-28	905824	26-04-10
905505	02-28-22	905569	34-20-06	905633	15-33-15	905697	16-30-16	905761	11-29-35	905825	24-34-24
905506	22-32-18	905570	30-16-34	905634	34-08-30	905698	34-04-38	905762	14-00-22	905826	38-28-02
905507	02-08-14	905571	17-31-05	905635	24-38-28	905699	36-26-04	905763	22-00-34	905827	20-26-36
905508	16-02-16	905572	14-32-22	905636	38-28-38	905700	08-34-28	905764	32-18-36	905828	36-06-16
905509	36-02-36	905573	38-24-30	905637	27-01-35	905701	06-24-34	905765	24-06-20	905829	06-08-38
905510	08-30-36	905574	30-04-30	905638	32-18-28	905702	17-07-25	905766	02-08-18	905830	04-14-32
905511	10-20-26	905575	29-15-25	905639	18-20-26	905703	22-36-10	905767	18-28-02	905831	34-00-18
905512	29-31-05	905576	12-02-32	905640	36-26-36	905704	33-23-05	905768	03-21-35	905832	34-16-30
905513	12-02-20	905577	02-12-34	905641	32-38-32	905705	22-32-02	905769	34-20-26	905833	18-08-14
905514	22-04-34	905578	28-38-32	905642	26-36-22	905706	31-05-15	905770	24-02-20	905834	30-36-10
905515	11-21-15	905579	09-31-05	905643	22-08-22	905707	07-17-35	905771	16-22-36	905835	32-38-04
905516	18-28-10	905580	22-12-26	905644	12-22-12	905708	16-22-04	905772	06-24-06	905836	20-02-16
905517	36-18-12	905581	02-16-10	905645	33-03-25	905709	34-20-34	905773	28-02-28	905837	19-37-15
905518	30-16-22	905582	22-24-30	905646	06-12-34	905710	30-32-26	905774	07-37-15	905838	32-06-20
905519	36-38-20	905583	34-24-14	905647	18-00-18	905711	20-06-12	905775	30-16-06	905839	22-32-14
905520	24-14-08	905584	34-08-14	905648	12-18-12	905712	12-02-16	905776	16-02-32	905840	28-06-00
905521	35-05-15	905585	22-08-30	905649	23-25-35	905713	32-18-04	905777	24-14-00	905841	02-24-14
905522	34-16-10	905586	12-38-32	905650	00-14-00	905714	16-34-12	905778	18-32-06	905842	02-28-18
905523	06-16-10	905587	34-16-22	905651	20-26-20	905715	00-06-24	905779	34-12-18	905843	22-04-30
905524	10-24-14	905588	24-14-20	905652	11-25-15	905716	02-32-06	905780	04-12-10	905844	05-31-25
905525	00-06-36	905589	00-30-04	905653	26-04-22	905717	28-38-08	905781	18-00-06	905845	09-15-25
905526	38-08-22	905590	25-07-25	905654	07-25-15	905718	21-07-25	905782	19-01-35	905846	04-26-00
905520 905527	33-35-25	905591	18-00-10	905655	28-06-24	905718	36-26-08	905783	13-15-05	905840 905847	10-28-18
						905720		905783	34-08-38	905847 905848	
905528	30-16-26	905592	28-30-16	905656	18-04-26		30-16-38				28-18-04
905529	01-03-25	905593	30-12-34	905657	00-02-12	905721	02-32-26	905785	14-36-30	905849	20-38-08
905530	20-26-04	905594	06-24-30	905658	37-19-25	905722	17-19-25	905786	17-31-25	905850	19-05-15
905531	01-27-05	905595	00-26-32	905659	38-12-38	905723	02-28-34	905787	26-04-18	905851	28-02-32
905532	28-10-20	905596	08-38-28	905660	26-32-38	905724	32-14-20	905788	36-38-08	905852	02-12-02
905533	00-02-08	905597	28-18-12	905661	24-02-08	905725	00-18-28	905789	04-34-08	905853	00-22-28
905534	20-38-16	905598	30-04-18	905662	22-36-14	905726	07-09-15	905790	06-16-02	905854	32-06-00
905535	17-03-25	905599	24-30-08	905663	10-32-02	905727	34-00-30	905791	21-39-25	905855	14-36-02
905536	30-20-34	905600	20-30-20	905664	24-06-32	905728	04-06-16	905792	16-06-12	905856	02-16-22
905537	32-02-16	905601	10-12-38	905665	26-00-14	905729	34-16-38	905793	08-18-32	905857	24-10-36
905538	06-24-10	905602	35-01-15	905666	32-10-32	905730	30-00-10	905794	10-24-06	905858	00-02-36
905539	04-18-28	905603	39-01-15	905667	18-24-18	905731	00-22-00	905795	08-14-28	905859	32-06-28
905540	00-18-24	905604	24-26-16	905668	32-06-36	905732	12-14-36	905796	30-12-06	905860	07-29-35
905541	18-36-22	905605	08-26-04	905669	08-10-16	905733	20-02-08	905797	36-22-36	905861	06-28-14
905542	26-16-14	905606	30-20-30	905670	04-18-12	905734	24-10-20	905798	18-28-14	905862	16-02-36
905543	24-26-20	905607	02-12-26	905671	28-34-08	905735	04-06-32	905799	12-30-08	905863	01-11-05
905544	26-08-22	905608	30-32-18	905672	30-16-10	905736	27-09-35	905800	01-11-25	905864	24-38-08
905545	16-34-24	905609	10-20-02	905673	18-08-18	905737	14-24-34	905801	12-30-16	905865	10-28-38

					•		
		(Com	binat	Part : tion Lo 9073:	ock)		XEDEX
\bigcirc							Armored Door Loops
	905866 905867	34-12-22 10-28-22	905930 905931	18-08-30 02-20-10	905994 905995	32-14-36 13-39-25	·
	905868	20-30-36	905932	23-37-15	905996	10-00-30	More sizes: 1/4" & 3/8".
	905869 905870	34-00-26 38-08-18	905933 905934	14-04-38 04-10-16	905997 905998	00-18-04 36-18-24	More lengths: 18, 24",
	905871	30-04-22	905935	00-10-16	905999	14-16-38	30", 45" & 60".
	905872 905873	27-05-35 08-18-08	905936 905937	24-14-36 28-10-24	906000 906001	09-39-25 32-34-28	More colors: Aluminum,
	905873	30-36-26	905937	28-10-24 14-04-26	906001	05-15-05	Duro, Gold, Black & White.
	905875	15-21-35	905939	33-11-25	906003	31-05-35	
	905876 905877	30-08-34 15-29-35	905940 905941	16-30-08 06-20-14	906004 906005	28-14-28 28-18-36	THAN ANY OTHER BRAND!
	905878	02-12-22	905942	20-06-16	906006	32-06-32	Now Available: Keedex K-DS
	905879 905880	22-24-10 26-00-34	905943 905944	02-20-34 26-12-18	906007 906008	05-19-05 14-00-26	All Stainless Steel Door Loop.
	905881	34-24-06	905945	20-34-16	906009	12-34-00	
	905882 905883	10-32-06 19-01-15	905946 905947	07-09-35 32-02-32	906010 906011	21-03-25 16-38-08	
	905884	14-24-02	905948	14-16-02	906012	29-39-25	
	905885 905886	16-34-00 32-10-04	905949 905950	16-22-32 32-14-32	906013 906014	24-26-08 29-11-25	VIINEY C
	905887	06-16-26	905951	10-32-22	906014	09-19-25	
	905888	28-14-36	905952	18-20-14	906016	29-15-05	Waldahla Cata Bayaa
	905889 905890	36-18-36 02-28-10	905953 905954	20-10-16 10-36-18	906017 906018	00-22-32 38-12-18	
	905891	34-08-26	905955	27-29-15	906019	26-32-22	With more than 100 different
	905892 905893	26-04-14 38-24-02	905956 905957	24-38-32 37-39-25	906020 906021	26-36-30 04-30-36	models available, Keedex has 0
\bigcirc	905894	38-16-06	905958	22-32-26	906022	31-13-35	a solution for your gate lock
	905895 905896	16-18-28 38-26-10	905959 905960	26-08-14 25-39-25	906023 906024	20-38-04 18-04-10	installation. Keedex Weldable
	905897	14-00-10	905961	32-34-20	906025	13-15-25	👸 🛛 Gate Boxes are available for
	905898 905899	34-04-10 08-30-24	905962 905963	38-12-22 30-12-22	906026 906027	08-22-00 34-36-14	cylindrical locks, deadbolts,
	905900	04-30-24	905964	04-22-16	906028	16-38-24	mortise locks, push-button
	905901 905902	06-28-34 12-30-00	905965 905966	02-32-10 14-20-34	906029 906030	02-04-22 04-14-04	locks, lever locks, hotel locks,
	905902	30-32-38	905967	04-18-00	906030	18-36-30	electric strikes and more.
	905904	38-00-14	905968	04-10-36	906032 906033	15-25-35	
	905905 905906	10-32-10 13-27-05	905969 905970	26-32-18 28-14-24	906033	08-38-04 22-12-34	
	905907	26-32-26	905971	39-25-15	906035	18-08-22	
	905908 905909	12-38-04 29-35-25	905972 905973	18-32-38 38-00-26	906036 906037	06-24-38 34-04-14	The Door Laser The Affordable
	905910	04-22-36	905974	29-39-05	906038	06-12-06	& Effective Tool
	905911 905912	12-02-36 02-32-02	905975 905976	38-04-18 28-34-24	906039 906040	05-11-25 22-04-14	For Core Drilling Doors.
	905913	02-24-10	905977	08-22-08	906041	30-08-22	Laser Sight For
	905914 905915	36-22-04 36-10-20	905978 905979	06-20-34 39-17-35	906042 906043	13-31-25 14-24-10	Accurate Drilling.
	905916	34-12-02	905980	02-04-10	906044	16-26-36	1/4" Bit For Pilot
	905917 905918	02-16-06 18-28-06	905981 905982	12-30-20 38-20-34	906045 906046	12-26-36 19-21-15	Hole Included.
	905919	16-22-16	905983	36-06-28	906047	11-37-15	Available From
	905920 905921	35-25-15 21-23-05	905984 905985	04-30-04 38-08-30	906048 906049	14-36-22 02-28-02	Your Distributor.
	905921	20-32-20	905986	02-08-30	906050	24-10-00	Keedex, Inc.
	905923 905924	24-30-16 34-16-34	905987 905988	33-11-05 37-11-25	906051 906052	20-22-32 39-09-35	12931 Shackelford Lane
\bigcirc	905925	02-12-38	905989	39-13-35	906053	32-02-36	Garden Grove, CA 92841 714-636-5657
	905926	16-18-00	905990	27-17-35	906054	16-18-32	Call or write today e-mail: info@keedex.com
	905927 905928	14-00-18 38-12-02	905991 905992	28-02-24 22-08-18	906055 906056	34-01-34 37-11-05	for your free catalog! e-mail: into@keedex.com
	905929	35-17-35	905993	26-04-26	906057	30-32-22	

Circle 244 on Rapid Reply

											\bigcirc
906058	38-00-10	906087	00-18-32	906116	24-30-20	906145	35-17-35	906209	32-38-20	906273	24-14-24
906059	04-18-24	906088	32-02-11	906117	36-18-04	906146	18-08-30	906210	30-36-30	906274	20-38-32
906060	02-20-02	906089	30-20-06	906118	39-05-15	906147	02-20-10	906211	34-16-06	906275	12-26-04
906061	06-32-22	906090	25-11-05	906119	02-20-14	906148	23-37-15	906212	21-39-05	906276	12-30-04
906062	18-04-14	906091	04-06-28	906120	12-30-36	906149	14-04-38	906213	38-20-14	906277	20-34-04
906063	10-20-38	906092	08-34-16	906121	12-22-28	906150	04-10-16	906214	18-20-02	906278	32-18-00
906064	23-29-15	906093	10-12-06	906122	12-02-24	906151	00-10-16	906215	37-39-05	906279	02-04-34
906065	04-14-36	906094	16-26-08	906123	20-26-32	906152	24-14-36	906216	36-26-16	906280	26-00-18
906066	34-08-34	906095	33-15-25	906124	00-30-36	906153	28-10-24	906217	13-15-25	906281	26-16-22
906067	32-18-24	906096	36-10-00	906125	22-28-18	906154	14-04-26	906218	08-22-00	906282	22-12-02
906068	28-02-08	906097	02-20-30	906126	13-23-05	906155	33-11-25	906219	34-36-14	906283	11-01-15
906069	14-28-38	906098	16-26-16	906127	04-22-04	906156	16-30-08	906220	16-38-24	906284	32-38-16
906070	36-06-20	906099	17-39-25	906128	22-04-26	906157	06-20-14	906221	02-04-22	906285	10-32-18
906071	26-08-02	906100	16-26-00	906129	37-27-05	906158	20-06-16	906222	04-14-04	906286	34-36-02
906072	38-04-26	906101	31-01-35	906130	20-34-28	906159	02-20-34	906223	18-36-30	906287	25-11-25
906073	30-36-14	906102	28-34-28	906131	27-37-15	906160	26-12-18	906224	15-25-35	906288	30-00-14
906074	24-34-12	906103	31-17-35	906132	28-10-04	906161	20-34-16	906225	08-38-04	906289	14-24-38
906075	25-27-05	906104	00-06-28	906133	20-10-36	906162	07-09-35	906226	22-12-34	906290	28-06-36
906076	08-10-32	906105	10-16-38	906134	12-14-32	906163	32-02-32	906227	18-08-22	906291	06-16-06
906077	30-00-26	906106	02-32-18	906135	02-08-26	906164	14-16-02	906228	16-24-38	906292	32-22-16
906078	06-16-34	906107	24-02-32	906136	00-10-36	906165	16-22-32	906229	34-04-14	906293	25-31-25
906079	02-16-34	906108	28-14-08	906137	26-36-26	906166	32-14-32	906230	06-12-06	906294	27-05-15
906080	24-14-04	906109	20-38-20	906138	04-34-16	906167	10-32-22	906231	05-11-25	906295	30-00-06
906081	22-00-14	906110	36-02-28	906139	24-06-28	906168	18-20-14	906232	22-04-14	906296	29-07-25
906082	16-18-08	906111	26-00-26	906140	12-34-24	906169	12-38-28	906233	30-08-22	906297	10-28-06
906083	08-30-12	906112	38-04-34	906141	20-22-04	906170	22-32-06	906234	13-31-25	906298	22-12-30
906084	08-10-00	906113	12-34-20	906142	00-06-32	906171	16-26-12	906235	14-24-10	906299	32-14-24
906085	34-08-02	906114	04-34-04	906143	11-19-25	906172	10-16-10	906236	16-26-36	906300	12-22-16
906086	08-26-36	906115	20-10-24	906144	34-04-18	906173	24-06-00	906237	12-26-36	906301	20-22-16
12						906174	06-28-38	906238	19-21-15	906302	36-38-16
1.1.2.1						906175	25-15-25	906239	11-37-15	906303	05-35-25
Y	OU /	ASKI	ED FO	DR I'	Г.	906176	18-00-30	906240	14-36-22	906304	14-24-18
						906177	18-08-38	906241	11-29-35	906305	36-14-04
		1000	04107744			906178	34-20-38	906242	14-00-22	906306	08-30-00
	_	1000				906179 906180	36-10-04 32-14-08	906243 906244	22-00-34 32-18-36	906307 906308	14-04-30 13-35-05
	_					906180 906181	16-30-20	906244	24-06-20	906308	30-08-30
	_	3				906181	10-30-20	906245	24-00-20 02-08-18	906309 906310	30-20-14
		100000				906183	04-06-00	906240	18-28-02	906311	00-22-16
		111152				906184	34-24-10	906248	03-21-35	906312	20-02-28
		Sec. 1	20000			906185	04-30-08	906249	34-20-26	906313	18-08-14
		1				906186	22-36-22	906250	24-02-20	906314	30-36-10
	_	ALL DA				906187	38-04-10	906251	16-22-36	906315	32-38-04
	_	122.014				906188	10-20-14	906252	06-24-06	906316	20-02-16
	And in case of	10807 West	ALM NOT THE R.			906189	14-32-10	906253	28-02-28	906317	19-37-15
	-					906190	39-21-35	906254	07-37-15	906318	32-06-20
Y	Όι	J (G		2.9		906191	10-12-30	906255	30-16-06	906319	22-32-14
						906192	02-12-06	906256	16-02-32	906320	28-06-00
		4in - 1	a a la M	A/:4L		906193	20-10-32	906257	24-14-00	906321	02-24-14
	wor	use L	.ock V	Vith		906194	20-34-08	906258	18-32-06	906322	02-28-18
						906195	16-34-28	906259	34-12-18	906323	22-04-30
CL	UTCH	NG	MEC	HAN	SM	906196	02-28-38	906260	04-14-08	906324	05-31-25
						906197	10-20-34	906261	18-00-06	906325	09-15-25
	withstand extreme tise lock with Club			Ideally Sui		906198	38-16-30	906262	19-01-35	906326	04-26-00
the most sopi	histicated lockset	in the market. T		 Hospitals Schools / 	Universities	906199	22-28-14	906263	13-15-05	906327	10-28-18
one lock you	have been waiting	1101.		Factories		006200	06 22 10	006264	21 00 20	006228	29 19 04

 Fospitars
 Schools / Universities
 Factories / Offices
 Commercial Buildings the market. This is ost soph ed lockset in one lock you have been waiting for. Available In: • Sectional or Escutcheon Trims. • 6 Offerent Levers To Chocae From. • 6 Attractive BHMA Finishes. Finer Residences UL Listed 3-Hour Frie Rating
 Please visit us at ALOA EXPO Booth # 1510
 ANSI Grade 1
 S'Area Manufacturer's Warranty

TOWNSTEEL INC. 1611 W. San Bernardino Road #A. Covina. CA 91722 sales@townsteel.com Tel 026-858-5500 Fax: 626-658-3393 877-858-0888 www.townsteel.com

146 • Visit www.TheNationalLocksmith.com

10-36-06 Circle 281 on Rapid Reply

06-32-10

18-04-18

36-22-16

24-26-32

27-09-15

31-37-15

39-09-15

09-11-05

906264

906265

906266

906267

906268

906269

906270

906271

906272

906200

906201

906202

906203

906204

906205

906206

906207

906208

34-08-38

02-08-38

14-28-02

14-32-38

05-27-05

38-08-34

04-18-08

08-14-24

04-22-12 906336

906328

906329

906330

906331

906332

906333

906334

906335

28-18-04

20-38-08

19-05-15

28-02-32

02-12-02

00-22-28

32-06-00

14-36-02

02-16-22

)	906337	07-25-35	906366	16-26-32	906395	16-38-08	906424	04-22-00	906453	26-00-06	906482	32-22-08
	906338	00-14-36	906367	14-32-18	906396	29-39-25	906425	37-23-05	906454	02-08-02	906483	38-04-14
	906339	10-12-34	906368	24-30-12	906397	24-26-08	906426	34-24-18	906455	39-25-35	906484	04-10-32
	906340	19-09-15	906369	16-30-16	906398	29-11-25	906427	12-14-04	906456	38-20-30	906485	28-10-36
	906341	28-38-20	906370	34-04-38	906399	09-19-25	906428	38-00-34	906457	20-34-24	906486	34-04-26
	906342	14-20-14	906371	36-26-04	906400	29-15-05	906429	16-06-28	906458	26-00-30	906487	28-30-36
	906343	10-00-34	906372	08-34-28	906401	00-22-32	906430	36-02-20	906459	04-10-00	906488	22-24-38
	906344	34-04-30	906373	06-24-34	906402	38-12-18	906431	22-28-10	906460	14-32-02	906489	37-03-25
	906345	36-26-00	906374	17-07-25	906403	26-32-22	906432	04-26-12	906461	02-32-22	906490	08-26-16
	906346	38-16-38	906375	22-36-10	906404	26-36-30	906433	22-04-38	906462	28-34-00	906491	18-00-22
	906347	25-31-05	906376	33-23-05	906405	04-30-36	906434	28-02-16	906463	04-06-36	906492	36-22-00
	906348	12-18-28	906377	22-32-02	906406	31-13-35	906435	38-28-10	906464	14-04-22	906493	26-08-18
	906349	00-06-00	906378	31-05-15	906407	20-38-04	906436	22-12-38	906465	32-22-00	906494	12-22-32
	906350	20-34-12	906379	07-17-35	906408	18-04-10	906437	16-38-12	906466	33-35-05	906495	20-30-04
	906351	08-34-00	906380	16-22-04	906409	20-38-24	906438	20-22-28	906467	07-33-15	906496	14-20-30
	906352	20-22-00	906381	34-20-34	906410	02-04-30	906439	28-06-32	906468	36-18-32	906497	08-18-24
	906353	15-01-35	906382	30-32-26	906411	10-12-18	906440	10-36-10	906469	00-18-00	906498	00-26-16
	906354	32-02-28	906383	20-06-12	906412	20-38-12	906441	14-36-10	906470	10-16-34	906499	34-36-26
	906355	31-33-15	906384	12-02-16	906413	38-24-34	906442	08-38-24	906471	18-20-30	906500	28-38-04
	906356	28-18-32	906385	32-34-28	906414	08-14-36	906443	28-30-24	906472	26-36-10	906501	26-04-38
	906357	30-12-02	906386	05-15-05	906415	00-30-08	906444	25-39-05	906473	26-36-02	906502	30-08-26
	906358	08-38-32	906387	31-05-35	906416	38-00-22	906445	01-31-25	906474	10-24-18	906503	00-10-04
	906359	04-14-28	906388	28-14-28	906417	39-05-35	906446	19-25-35	906475	29-11-05	906504	30-36-18
	906360	04-14-00	906389	28-18-36	906418	16-06-00	906447	16-30-04	906476	32-10-00	906505	24-30-36
	906361	23-25-15	906390	32-06-32	906419	10-28-02	906448	12-14-00	906477	28-14-04	906506	06-12-22
	906362	36-22-08	906391	05-19-05	906420	04-18-36	906449	30-16-02	906478	08-30-20	906507	14-28-14
	906363	18-08-34	906392	14-00-26	906421	12-22-00	906450	04-30-16	906479	36-02-12	906508	38-08-02
	906364	34-12-34	906393	12-34-00	906422	20-22-08	906451	08-30-16	906480	20-30-08	906509	30-20-10
	906365	34-24-30	906394	21-03-25	906423	17-19-05	906452	08-26-32	906481	06-36-30	906510	26-04-30







Call 800-327-8466 or visit www.tektone.net/tnl3.htm

TekTone Sound & Signal Mfg., Inc. 277 Industrial Park Road • Franklin, NC 28734

000544					~~ ~~ ~~	000700			00.00.45		
906511	06-32-18	906575	02-20-14	906639	02-08-26	906703	31-17-35	906767	03-33-15	906831	26-16-06
906512	32-10-36	906576	12-30-36	906640	00-10-36	906704	00-06-28	906768	04-10-20	906832	00-22-08
906513	04-34-20	906577	24-30-04	906641	26-36-26	906705	10-16-38	906769	34-24-06	906833	39-21-15
906514	35-09-35	906578	08-22-16	906642	04-34-16	906706	02-32-18	906770	10-32-06	906834	30-36-02
906515	20-02-36	906579	06-28-06	906643	24-06-28	906707	24-02-32	906771	19-01-15	906835	24-26-04
906516	16-26-04	906580	18-28-34	906644	12-34-24	906708	28-14-08	906772	14-24-02	906836	03-29-15
906517	28-14-20	906581	34-12-38	906645	20-22-04	906709	20-38-20	906773	16-34-00	906837	38-20-26
906518	00-02-24	906582	02-24-18	906646	00-06-32	906710	36-02-28	906774	32-10-04	906838	12-14-24
906519	36-14-00	906583	34-20-02	906647	13-19-25	906711	26-00-26	906775	06-16-26	906839	10-00-06
906520	08-14-00	906584	02-16-38	906648	34-04-18	906712	38-04-34	906776	28-14-36	906840	26-12-26
906521	36-06-00	906585	12-38-12	906649	26-28-34	906713	12-34-20	906777	36-18-36	906841	08-22-08
906522	38-28-14	906586	24-02-16	906650	18-08-02	906714	04-34-04	906778	02-28-10	906842	06-20-34
906523	10-32-26	906587	36-10-32	906651	06-20-30	906715	20-10-24	906779	34-08-26	906843	39-17-35
906524	24-02-24	906588	20-10-20	906652	08-26-12	906716	24-30-20	906780	26-04-14	906844	02-04-10
906525	06-12-02	906589	32-14-28	906653	12-18-24	906717	36-18-04	906781	38-24-02	906845	12-30-20
906525 906526	14-16-06	906590	16-02-28	906654	03-05-35	906717	39-05-15	906781	38-16-06	906845 906846	38-20-34
906527	30-12-26	906591	22-28-38	906655	28-10-16	906719	02-20-14	906783	16-18-28	906847	36-06-28
906528	26-32-06	906592	26-28-02	906656	14-32-06	906720	12-30-36	906784	38-24-10	906848	04-30-04
906529	00-26-36	906593	06-12-26	906657	02-28-22	906721	18-00-26	906785	14-00-10	906849	38-08-30
906530	16-34-08	906594	04-30-00	906658	22-32-18	906722	20-22-12	906786	34-04-10	906850	02-08-30
906531	32-34-24	906595	28-10-00	906659	02-08-14	906723	06-32-06	906787	08-30-24	906851	33-11-05
906532	12-26-00	906596	06-36-14	906660	16-02-16	906724	24-34-16	906788	04-30-20	906852	37-11-25
906533	16-38-32	906597	34-20-30	906661	36-02-36	906725	15-21-15	906789	06-28-34	906853	39-13-35
906534	30-36-22	906598	10-16-06	906662	08-30-36	906726	02-04-38	906790	12-30-00	906854	27-17-35
906535	20-06-00	906599	22-00-10	906663	10-20-26	906727	18-28-22	906791	30-32-38	906855	28-02-24
906536	26-00-10	906600	16-38-04	906664	29-31-05	906728	22-12-06	906792	38-00-14	906856	22-08-18
906537	08-30-08	906601	02-08-22	906665	12-02-20	906729	06-28-22	906793	30-36-14	906857	26-04-26
906538	39-29-15	906602	01-19-05	906666	22-04-34	906730	36-10-16	906794	24-34-12	906858	32-14-36
906539	06-36-06	906603	22-36-06	906667	11-21-15	906731	17-27-05	906795	25-27-05	906859	13-39-25
906540	16-18-04	906604	16-06-16	906668	18-28-10	906732	04-26-32	906796	08-10-32	906860	10-00-30
906541	12-18-32	906605	07-29-15	906669	36-18-12	906733	04-14-24	906797	30-00-26	906861	00-18-04
906542	14-20-02	906606	18-24-38	906670	30-16-22	906734	14-32-26	906798	06-16-35	906862	36-18-24
906543	38-24-06	906607	24-34-00	906671	36-38-20	906735	32-34-08	906799	02-16-35	906863	14-16-38
906544	34-36-18	906608	28-18-24	906672	24-14-08	906736	12-18-08	906800	24-14-04	906864	09-39-25
906545	22-28-34	906609	32-38-28	906673	35-05-15	906737	08-26-20	906801	22-00-14	906865	08-18-12
906546	10-32-38	906610	09-19-05	906674	34-16-10	906738	00-26-08	906802	16-18-08	906866	28-38-16
906547	22-36-26	906611	08-18-28	906675	06-16-10	906739	20-30-00	906803	08-30-12	906867	00-15-28
906548	30-20-38	906612	11-25-35	906676	10-24-14	906740	21-35-25	906804	08-10-00	906868	22-36-30
906549	06-28-10	906613	12-22-04	906677	00-06-36	906741	18-20-38	906805	34-08-02	906869	28-06-12
906550	30-32-14	906614	21-31-05	906678	38-08-22	906742	05-23-05	906806	08-26-36	906870	20-30-12
906551	14-32-14	906615	04-34-28	906679	33-35-25	906743	08-26-00	906807	00-18-32	906871	23-05-35
906552	08-34-20	906616	32-14-00	906680	30-16-26	906744	32-14-04	906808	32-02-12	906872	35-13-35
906553	02-20-30	906617	20-02-20	906681	01-03-25	906745	00-14-24	906809	30-20-06	906873	12-22-36
906554	16-26-16	906618	08-18-00	906682	20-26-04	906746	10-28-10	906810	25-11-05	906874	00-26-04
906555	17-39-25	906619	34-12-30	906683	01-27-05	906747	28-34-20	906811	06-06-28	906875	37-15-05
906556	16-26-00	906620	22-08-38	906684	28-10-20	906748	06-16-22	906812	08-34-16	906876	36-22-12
906557	31-01-35	906621	18-32-14	906685	00-02-08	906749	33-19-25	906813	10-12-06	906877	32-34-16
906558	28-34-28	906622	20-06-24	906686	20-38-16	906750	24-06-16	906814	16-26-08	906878	17-23-05
906559	31-17-35	906623	29-31-25	906687	17-03-25	906751	18-32-18	906815	33-15-25	906879	10-16-30
906560	00-06-28	906624	14-36-18	906688	30-20-34	906752	18-24-10	906816	36-10-00	906880	23-09-15
906561	10-16-38	906625	12-22-28	906689	32-02-16	906753	38-24-18	906817	22-28-22	906881	12-34-12
906562	02-32-18	906626	12-02-24	906690	06-24-10	906754	04-22-28	906818	06-36-10	906882	23-13-35
906563	24-02-32	906627	20-26-32	906691	04-18-28	906755	30-00-30	906819	23-09-35	906883	09-11-25
906564	28-14-08	906628	20-20-32 00-30-36	906692	00-18-24	906756	07-21-15	906820	36-10-28	906884	38-24-14
906565 906565	20-38-20	906629	22-28-18	906693		906757		906821		906885	
					18-36-22		39-01-35		34-00-10		30-32-02
906566 906567	36-02-28 26-00-26	906630 906631	13-23-05 04-22-04	906694 906695	26-16-10 26-26-20	906758 906759	04-26-20 22-32-10	906822 906823	10-00-18	906886 906887	05-07-25 04-26-16
								906823	12-34-16		
906568	38-04-34	906632	22-04-26	906696	26-08-22	906760	10-24-10		38-08-26	906888	04-30-12
906569	12-34-20	906633	37-27-05	906697	02-20-30	906761	14-20-26	906825	30-00-18	906889	25-35-05
906570	04-34-04	906634	20-34-28	906698	16-26-16	906762	26-16-30	906826	02-28-06	906890	30-04-14
906571	20-10-24	906635	27-37-15	906699	17-39-25	906763	06-28-18	906827	08-18-36	906891	19-29-35
906572	24-30-20	906636	28-10-04	906700	16-26-00	906764	21-27-05	906828	09-27-05	906892	28-30-12
906573	36-18-04	906637	20-10-36	906701	31-01-35	906765	24-26-36	906829	03-05-15	906893	18-32-10
906574	39-05-15	906638	12-14-32	906702	28-34-28	906766	32-10-20	906830	14-20-38	906894	14-16-34





Visit LA GARD'S booth #1005, at ALOA and

register to participate in one of our **free seminars**. You can even earn a certificate for each seminar attended. Seminars will take place every hour and will cover a different product.

Take one or take all five.

Each of our classes is being offered once a day.

- Classes are hands-or
- Class sizes are limited, so register early
- Certificates and a thank you gift will be given out to every student
- Products covered include LGBASIC[#], LGCOMBO, LPAUDIT, SMARTLINC and the new Group 2M Mechanical





One Company... Endless Solutions

app

Circle 248 on Rapid Reply





Visit LA GARD'S booth #1005, at ALOA and register to participate in one of our free seminars. You can even earn a certificate for each seminar attended. Seminars will take place every hour and will cover a different product.

Take one or take all five. Each of our classes is being offered once a day.

- Classes are hands-on
- Class sizes are limited, so register early
- Certificates and a thank you gift will be given out to every student
- Products covered include LGBASIC", LGCOMBO, LPAUDIT, SMARTLINC and the new Group 2M Mechanical

LA GARD



One Company... Endless Solutions

app

Continued from page 148 Master, Part 2 (Combination Lock) 900001-907353

	~~ ~- ~-						~~ ~~ ~~				
906895	03-25-35	906959	06-20-06	907023	12-38-16	907087	20-06-28	907151	34-12-06	907215	12-30-08
906896	16-18-12	906960	14-16-30	907024	12-30-24	907088	08-10-36	907152	36-14-20	907216	01-11-25
906897	26-32-14	906961	34-20-14	907025	30-00-22	907089	10-12-26	907153	10-32-10	907217	12-30-16
906898	00-06-20	906962	10-00-14	907026	00-10-24	907090	36-22-32	907154	13-27-05	907218	00-06-16
906899	31-09-15	906963	38-04-22	907027	36-38-04	907091	01-15-25	907155	26-32-26	907219	18-24-02
906900	14-28-22	906964	13-03-25	907028	11-17-35	907092	37-15-25	907156	12-38-04	907220	00-22-04
906901	20-10-28	906965	26-36-06	907029	04-34-12	907093	38-28-06	907157	29-35-25	907221	10-24-02
906902	10-16-02	906966	34-04-22	907030	16-22-00	907094	29-03-25	907158	04-22-36	907222	11-33-15
906903	26-12-02	906967	04-26-36	907031	10-36-26	907095	00-14-32	907159	12-02-36	907223	23-33-15
906904	32-06-24	906968	00-30-12	907032	04-30-24	907096	30-04-38	907160	02-32-02	907224	04-34-24
906905	32-02-24	906969	16-02-08	907033	34-16-26	907097	16-34-04	907161	02-24-10	907225	02-24-38
906906	17-35-05	906970	10-00-10	907034	16-26-20	907098	06-08-30	907162	36-22-04	907226	14-00-14
906907	34-24-34	906971	06-28-02	907035	16-38-28	907099	06-36-22	907163	36-10-20	907227	36-10-24
906908	28-02-12	906972	38-04-38	907036	26-28-06	907100	06-32-14	907164	34-12-02	907228	18-04-30
906909	03-29-35	906973	02-08-34	907037	22-28-06	907101	09-15-05	907165	02-16-06	907229	10-24-30
906910	12-18-36	906973	24-38-16	907038	10-20-10	907101	36-14-36	907166	18-28-06	907230	34-36-06
906910 906911	20-26-08	906974	32-10-28	907038	18-00-34	907102	06-20-26	907160	16-22-16	907230 907231	24-30-00
906912	18-20-10	906976	08-34-08	907040	00-26-00	907104	18-04-22	907168	35-25-15	907232	00-02-32
906913	26-28-38	906977	36-38-28	907041	34-00-06	907105	18-32-02	907169	21-23-05	907233	06-20-38
906914	29-35-05	906978	30-36-06	907042	26-16-02	907106	23-05-15	907170	20-34-20	907234	22-24-14
906915	22-36-18	906979	38-20-38	907043	22-24-34	907107	21-11-25	907171	24-30-16	907235	12-26-08
906916	26-00-22	906980	00-26-20	907044	12-26-12	907108	30-12-38	907172	34-16-34	907236	10-16-26
906917	30-12-18	906981	24-34-28	907045	00-30-00	907109	12-02-12	907173	02-12-38	907237	22-08-34
906918	06-36-02	906982	30-32-10	907046	10-24-34	907110	06-36-26	907174	16-18-00	907238	38-20-10
906919	01-19-25	906983	00-10-28	907047	04-18-04	907111	22-00-30	907175	14-00-18	907239	00-30-24
906920	28-18-28	906984	16-18-24	907048	24-34-20	907112	28-38-28	907176	38-12-02	907240	35-01-35
906921	06-24-18	906985	20-10-16	907049	10-36-22	907113	16-22-28	907177	02-28-02	907241	15-33-15
906922	10-36-30	906986	10-36-18	907050	08-14-08	907114	16-30-12	907178	24-10-00	907242	34-08-30
906923	38-00-30	906987	27-29-15	907051	26-16-38	907115	18-32-26	907179	20-22-32	907243	24-38-28
906924	34-24-38	906988	24-38-32	907052	04-26-04	907116	33-39-25	907180	39-09-35	907244	38-28-38
906925	30-16-30	906989	37-39-25	907053	06-24-14	907117	30-20-26	907181	32-02-36	907245	27-01-35
906926	26-12-34	906990	22-32-26	907054	35-09-15	907118	38-16-34	907182	16-18-32	907246	32-18-28
906927	14-36-14	906991	26-08-14	907055	28-14-00	907119	38-00-18	907183	34-00-34	907247	18-20-26
906928	12-18-00	906992	25-39-25	907056	03-09-35	907120	14-24-14	907184	37-11-05	907248	36-26-36
906929	11-01-35	906993	32-34-20	907057	34-20-06	907121	15-37-15	907185	30-32-22	907249	16-02-24
906930	12-26-16	906994	38-12-22	907058	30-16-34	907122	03-25-15	907186	38-00-10	907250	38-28-34
906931	14-16-22	906995	30-12-22	907059	17-31-05	907123	04-18-32	907187	04-18-24	907251	24-30-24
906932	16-34-20	906996	04-22-16	907060	14-32-22	907124	00-10-20	907188	02-20-02	907252	23-01-35
906933	06-08-34	906997	02-32-10	907061	38-24-30	907124	11-21-35	907189	06-32-22	907253	28-18-08
906934	02-20-38	906998	14-20-34	907062	30-24-30	907126	35-05-35	907190	18-04-14	907254	30-04-10
906935	02-20-30	906999	04-18-00	907062	29-15-25	907120	16-02-12	907190	10-20-38	907255	22-24-18
906935 906936	36-02-24	907000	04-10-00	907003	12-02-32	907127	26-08-34	907191	23-29-15	907255 907256	08-22-04
	22-04-22		26-32-18			907128		907192		907250 907257	
906937		907001		907065	02-12-34		18-36-26		04-14-36		14-04-18
906938	22-08-02	907002	28-14-24	907066	28-38-32	907130	00-02-16	907194	34-08-34	907258	22-00-22
906939	16-34-16	907003	39-25-15	907067	09-31-05	907131	12-38-20	907195	32-18-24	907259	20-30-24
906940	18-24-30	907004	18-32-38	907068	22-12-26	907132	10-24-38	907196	28-02-08	907260	14-04-10
906941	38-12-06	907005	38-00-26	907069	02-16-10	907133	12-22-08	907197	14-28-38	907261	08-14-20
906942	20-26-00	907006	29-39-05	907070	22-24-30	907134	36-14-08	907198	36-06-20	907262	26-16-34
906943	28-10-28	907007	38-04-18	907071	34-24-14	907135	26-36-14	907199	26-08-02	907263	20-02-24
906944	26-32-02	907008	28-34-24	907072	34-08-14	907136	18-00-14	907200	38-04-26	907264	22-04-18
906945	14-04-14	907009	38-28-18	907073	22-08-30	907137	04-14-20	907201	14-36-30	907265	22-00-06
906946	12-02-08	907010	03-21-15	907074	12-38-32	907138	28-02-36	907202	17-31-25	907266	37-07-25
906947	00-18-08	907011	07-13-35	907075	34-16-22	907139	02-04-26	907203	26-04-18	907267	37-19-05
906948	20-02-32	907012	14-24-30	907076	24-14-20	907140	22-12-18	907204	36-38-08	907268	30-08-14
906949	03-13-35	907013	13-35-25	907077	00-30-04	907141	20-06-36	907205	04-34-08	907269	02-16-02
906950	04-10-04	907014	08-30-04	907078	25-07-25	907142	04-06-24	907206	06-16-02	907270	08-34-12
906951	01-15-05	907015	36-38-12	907079	18-00-10	907143	36-02-08	907207	21-39-25	907271	18-04-38
906952	38-16-22	907016	20-02-12	907080	28-30-16	907144	28-06-20	907208	16-06-12	907272	22-00-18
906953	30-08-18	907017	04-26-08	907081	18-28-38	907145	30-32-06	907209	08-18-32	907273	38-12-30
906954	06-16-38	907018	24-26-12	907082	08-10-24	907146	34-00-22	907210	10-24-06	907274	02-24-06
906955	13-39-05	907019	18-36-18	907083	08-22-12	907147	01-23-05	907211	08-14-28	907275	28-10-32
906956	08-34-04	907020	10-36-14	907084	36-38-24	907148	18-36-14	907212	30-12-06	907276	14-20-06
906957	19-21-35	907021	19-25-15	907085	10-20-06	907149	14-04-34	907213	36-22-36	907277	20-26-16
906958	24-14-32	907022	00-10-00	907086	10-20-30	907150	04-10-28	907214	18-28-14	907278	18-28-18
	_ · · · 02	1 001022					0.1020			551210	

A timeline...

1673 - Chicago discovered by Marquette and Jolliet 1871 - The Great Chicago Fire - started in a Mr. O'Leary's cowbarn 1885 - Chicago's first skyscraper erected at the corner of LaSalle and Adams 1893 - Chicago Hosts the World Columbian (Worlds Fair) Exposition 1919 - Al Capone arrives in Chicago 1919 - The Chicago White Sox accused of throwing World Series 1929 - Capone orchestrates the St. Valentine's Day Massacre 1943 - Chicago's first subway system opens 1947 - Al Capone dies 1972-1978 - Chicago becomes the setting for The Bob Newhart Show (hi Bob) 1973 - The Sears Tower becomes the world's tallest skyscraper - until 1996 LOCKMASTERS' RETURNS ONCE AGAI 1 (O) / A\ **L(O)** A\ **...** With the industry's most innovative tools and training

Celebrating 50 Years Of Oustanding Service To The Security Industry

BOOTH 3109 LOCKMASTERS, INC. 800.654.0637 LOCKMASTERS.COM

We Have The Safes You Need For...

Colleges, Universities, Hotels, Motels, Hospitality, Hospitals and Health Care

O Protects laptop computers, palm pilots, CD players, cell phones and other personal property from unauthorized borrowing.



Model PV-81416-CS with Audit Trail Capability

O Provides the peace of mind and security quests need when traveling for pleasure or business. O Protects patients' personal property from pilfering, or protects drugs from unauthorized dispensation.

Cash Management



O Ideal for money counting rooms where accountability is paramount; keeps unauthorized hands from pilfering profits. O High security Medeco keyed or

electronic locks available for maximum protection. Master key and keyed alike options, Medeco removable core options and Simplex manual push button locks available on select models. O Choose from the largest selection

Model PRO-2225-CH-K Thru-The-Wall Safe with Security Cover of different models for your cash

Personal Security or Weapons

O Place in nightstand or take with you for security of personal property while traveling. O Equipped with Illinois pushbutton lock. O Can be secured in automobile trunk with optional mounting bracket.



All Safes Are Made In U.S.A



Continued from page 150

Master, Part 2 (Combination Lock) 900001-907353

907279	08-34-24	907307	36-26-20	907335	04-06-20
907280	34-00-14	907308	36-18-00	907336	26-28-18
907281	22-12-22	907309	18-20-34	907337	18-04-34
907282	09-35-25	907310	20-38-28	907338	36-14-28
907283	38-20-02	907311	34-12-26	907339	35-21-35
907284	30-04-34	907312	34-36-10	907340	09-23-05
907285	32-38-08	907313	20-34-00	907341	20-06-32
907286	11-13-35	907314	02-32-38	907342	16-38-20
907287	28-30-00	907315	22-24-02	907343	06-20-02
907288	20-10-00	907316	31-09-35	907344	08-18-04
907289	08-26-08	907317	13-19-05	907345	30-12-34
907290	34-08-18	907318	26-12-06	907346	06-24-30
907291	26-28-10	907319	35-21-15	907347	00-26-32
907292	17-36-05	907320	24-06-12	907348	08-38-28
907293	28-30-08	907321	02-16-26	907349	28-18-12
907294	38-20-06	907322	00-30-20	907350	30-04-18
907295	10-36-02	907323	38-16-02	907351	24-30-08
907296	14-28-34	907324	36-02-16	907352	20-30-20
907297	08-38-20	907325	04-22-08	907353	10-12-38
907298	00-30-16	907326	28-06-28		
907299	30-12-30	907327	14-10-24		
907300	32-34-00	907328	14-00-30		
907301	04-06-12	907329	27-13-35		
907302	12-34-28	907330	20-10-04		
907303	16-38-16	907331	20-06-20		
907304	00-02-20	907332	21-35-05		
907305	24-06-24	907333	14-28-10		
907306	12-14-08	907334	28-38-12		(
					(



There's an award-winning design waiting for you. Find out more at www.BiLock.com.



Patented and Tested to UL437 Toll Free 888-564-4656 Manufactured in the U.S. by Login Lock

Time Saving Tools

The "PIT BULL" Metal Door Latch Tool

Install cylindrical locks and deadbolts in metal doors with professional results. The **MDLT-1** "PIT BULL" will form a rectangular indention for a 1" or 1-1/8" latch face.

MDPS-4 & MDPS-6 Punch & Die Sets ((For Metal Cabinet Lock Installations)

Punch "Double D" holes in sheet metal cabinet doors and drawers with our MDPS series punch and die sets. Choose from two sizes, the **MDPS-4** for standard cam locks or the larger **MDPS-6** for ASSA pin tumbler cam locks.

HIT-25 Cabinet Lock Drill Guide 🔙

Our HIT-25 Cabinet lock Drill guide includes many important features:

- Five sizes of drill guide inserts 3/4", 7/8", 1", 1-1/8" and 1-1/4".
- · Rubber lined jaws to protect finished doors and drawers.
- · An adjustable sliding stop for repeat installations.
- The HIT-25 has a door range up to 1-1/2" thick and will accommodate backsets up to 2-5/8".

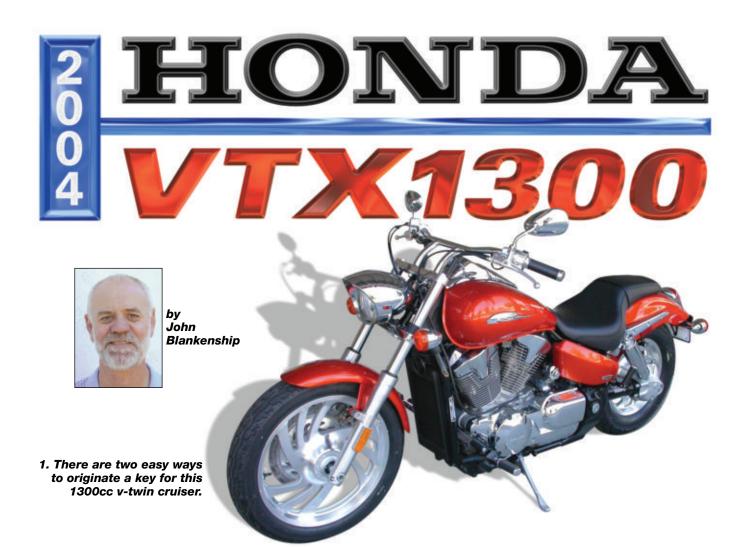


1825 Via Burton • Anaheim, CA 92806 • 714-772-5202 • Fax 714-772-2302 • www.majormfg.com • mail@majormfg.com Circle 254 on Rapid Reply

INC.

MAJOR MEG.

MAJOR MEG.





2. The first easy way is to read the code on the bottom of the gas cap. This view from the drivers seat shows the gas cap on top of the gas tank just below the instrument panel.



3. Pick the gas cap 90-degrees clockwise to unlock and remove the cap; it is usually easy to pick using a rake. You are picking against spring pressure so have a small screwdriver ready to finish turning it. It is also easy to read the heights of the wafers because there are only three depths and the keyway is wide open after you pivot the dust cap out of the way. The gas cap contains wafer tumblers in all five spaces.

Every Corbin Russwin[®] keyway you could possibly need!

We have expanded our offering of Corbin-Russwin 6-pin keyways avaliable from stock. This includes keyblanks and the following cylinders: 1000-118 (MORTISE) 3000-200 (RIM) 8000 (IC CORE) 2000-052 (CK4200) 2000-033 (CL3000) KEYWAYS AVAILABLE FROM STOCK AR, BL, BR, 97, 99 D1, D2, D3, D4 H1, H2, H3, H4, H5, H6, H7, H8 L1, L2, L3, L4 N1, N2, N3, N4, N5, N6, N7, N8, N9, N10, N11, N12, N13, N14, N15, N16, N17, N18, N19, N20, N21, N22, N23, N24, N25, N26, N27, N28 27, 27A1, 27A2, 27B1, 27B2 57A1, 57A2, 57B1, 57B2, 57C1, 57C2, 57D1, 57D2 59A1, 59A2, 59B1, 59B2, 59C1, 59C2, 59D1, 59B2, 60 67, 67A1, 67A2, 67B1, 67B2

27A1, 77A2, 77B1, 77B2 852 961, 082, 983

Russwin 7



Continued from page 154



4. The key code is stamped into the bottom of the gas cap. There are six characters, but the code is the last three. The first character of this code has been stamped over a circular recessed area and is not legible. It is always an A, B, C or D so we can tell from the top of the letter that it is a C, which means the code is C44. The A & B codes use an X84 and the C & D codes use an X138, so even if no part of the letter is visible, you can narrow it down to two codes by seeing which blank enters the keyway.

5. A code cut key with cuts of 33321 turns all four locks smoothly.



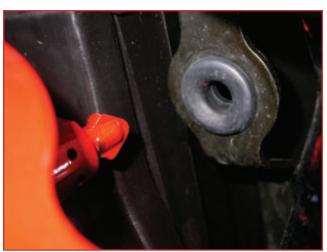


6. The second easy way to originate a key is to read the code on the side of the ignition lock. The ignition lock is located on the left side of the bike and to the rear of the engine. It helps to remove the side cover located just to the right of the lock. Pull out on the right side of the side cover to remove it.



8. After the pop-tab is free, move the side cover forward to free it from the two rubber mounts so you can completely remove it from the bike.

Continued on page 158



7. A pop-tab on the rear of the side cover has been pulled out of its rubber grommet.



IDN reserves the right to withhold premiums for delinquent, past due accounts.

303-922-3041

Detroit, MI 586+755+3658 (3 locations) 734-591-1150 Ottawa, Ont. 613-749-2172

Circle 238 on Rapid Reply

604-253-0017

Continued from page 156

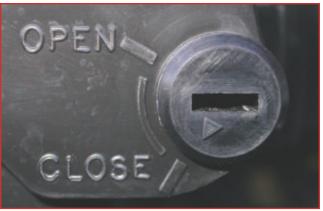


9. There is a toolbox located under the side cover.



11. Remove the large Phillips screw that holds the ignition lock cover on. The ignition lock only has positions for OFF & ON.

158 • Visit www.TheNationalLocksmith.com



10. The toolbox can be opened with the key, a key blank, or a screwdriver. I was even able to turn it with my fingers.



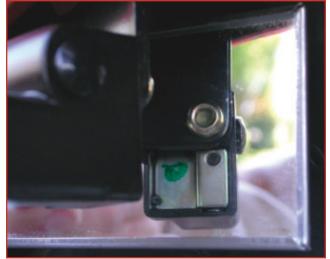
12. Pull the ignition lock cover off with a firm pull.



13. The code is located on the right side of the ignition lock. It is circled in the photo.



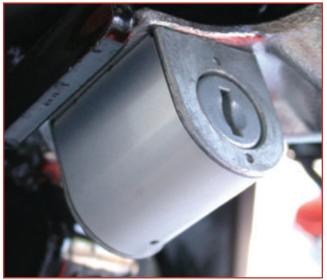
14. You can read the code without a mirror but it was the only way I could get a good photo of it. There are six characters but the code is the last three. It is in mirror language but you can see that the code is C44. The codes are sometimes stamped on the bottom of the lock and the mirror helps in those situations.



16. There is a code stamped on the back of the helmet lock but you need to remove the lock before you can read it. The mirror photo shows the tamper-resistant bolt that holds it on. There is not much clearance between the tire and the back of the lock so the best way to remove it is to use a spring-loaded center punch on the side of the bolt to back it out.



15. The helmet lock is located on the left side of the bike and to the rear of the shock absorber. You need to turn it 45-degrees counter-clockwise to unlock it.



17. The steering lock is located on the right side near the front forks. You need to turn it 180-degrees clockwise to lock it. The steering has to be turned all the way to the left or right before the bolt will extend. It is secured by two large Phillips screws from the top, but the front-end assembly needs to be removed before you can gain access to them.

Codes: A00-A99 & B00-B99 use IIco X84 (HD74), Curtis HD74, Sil	ca HON31R
Codes: C00-C99 & D00-D99 use IIco X138	(HD75), Curtis HD75, 8	Silca HON31
Spacing: 1=.098, 2=.197, 3=.295, 4=.394,	5=.492	
Depths: 1=.276, 2=.244, 3=.213		
Card Number: CMC37	Tumbler Locations:	12345
DSD Number: 406	Ignition Gas	X X X X X X X X X X
ITL Number: 214	Helmet	x x x x x
Curtis: HD-4 cam & HD-8A carriage	Steering	X X X X X X



A Peek at Movers & Shakers in the Industry

ATTENTION MANUFACTURERS AND DISTRIBUTORS: Would you like your company and products to be profiled in Thru The Keyhole? Please call Editor, Greg Mango, at (630) 837-2044.

Bianchi USA

For over 235 years, the Bianchi family has been a constant pioneer in the locksmith industry, beginning in the Cadore Valley of Northern Italy in 1770. Through five generations, the company evolved into a fullline manufacturer of keys and key cutting machines and began distributing worldwide in the mid 1900's. Bianchi products first landed in North America in the early 1980's and the first independent presence in the market came in 1989 when Massimo Bianchi expanded his Italian company, Silca, into the US. Following mergers in 1997 with the Canadian Unican Group and 2001 with the Ilco/Kaba Group, Massimo Bianchi left the organization and re-emerged with the acquisition of KeyLine, an Italian manufacturer of keys and key cutting machines in April of 2002.

In February of 2003, another big step was made when Bianchi USA opened its doors and became the North American presence for KeyLine and Bianchi products. Bianchi USA sells both Bianchi and private branded products and specializes in key cutting machines and transponder servicing tools. More recently, Bianchi USA announced the launch of its new transponder keys, which was introduced at SHDA 2005 in Phoenix, Arizona.



Since its inception, Bianchi USA has experienced tremendous growth and continues to pride itself on the tradition of quality and innovative products that was

started so many years ago. For more information on Bianchi USA products or the company, please call 800-891-2118 or visit www.bianchi1770usa.com.

TheNationalLocksmith.com Technical forums, chat, online store, plus visit our sponsors...



SAFE CORPORATION S)

www.a-bsafecorp.com

Ablov[®] DiskLock Pro info@abloy.ca



Indiana	Cash	Drawer Co.
B DIABA DISH DISIVILI (D.	11	Anyway you is TALCER IL BOLD is cline to a
www.icdp	os.con	1

6	A She had flat Rabar are Same for R. orm
SP -unit -	ore.com



Lockmantools Mulli-Tools 25 Fonction Companient www.lockmantools.com



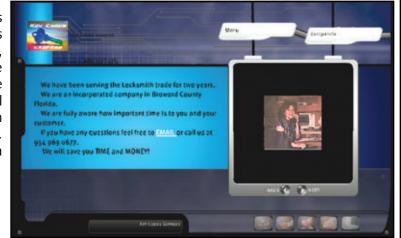
Key Codes Express

www.keycodesxpress.com



Key Codes Express has been serving the locksmith trade for two years selling key codes. If you are in need of a vehicle code, all you do is call, fax or e-mail them with the year, model and VIN#, and Key Codes Express will get back to you with the key bitting information. They have all foreign and domestic key codes and guarantee a one-hour or less turn-around and all codes are guaranteed or you pay nothing (for original non-rekeyed cylinders).

Key Codes Express offers a modern, easy-to-use web site providing all the information vou need. Check them out today!



Major Manufacturing

www.majormfg.com

McDonald DASH Locksmith Supply

www.mcdonalddash.com

MDS, Inc.



Midwest Wholesale
MIDWESTWHOLESALE
www.midwestwholesale.com

Monaco Lock



National Auto Lock Service, Inc. nal Auto Lack Service, Inc... the car guyst

www.laserkey.com

Omaha Wholesale Hardware



RS2 Technologies

Lookenth-friendly Access Control ĥŝ Decionalizati na la cia, celor www.rs2tech.com

Select Products Ltd.

R	SELECT HINGES
	Geared To Ship In 48 Hours

www.select-hinges.com

Manufacturers and distributors... join the high profile locksmith web site and you'll be featured here! Call Jeff Adair (ext. 15) or Debbie Schertzing (ext. 16) for details. (630) 837-2044

July 2005 • 165

Taking Industry Products for a... TEST DRIVE

Trace 1500-Watt Converter



THE NEED:

One of the problems confronted by any operation that is mobile is a power source. Many time we are close enough to a building that we can run an extension cord to a plugin and get power that way, but not always. It is just as common to get to a job and not find any available power source within a reasonable distance.

Small inverters are available and will do the job if you just need to run a fan or some light way current draw, but if you need to power your key machine or 1/2 inch drill, 400 to 800 watts just won't do the job. You need a bigger source.

THE ANSWER:

The Trace 1500-watt inverter will convert either 12 or 24 volts of DC power to a modified sine wave 120 volts AC. The 1500-watt inverter has sufficient output to run two 1/2 inch drills and a grinder at the same time. I know because I have done it just to see if it would do the job. I can easily run both my code machine and my duplicator at the same time and not have a problem with power.

What about a computer you ask? I realize that some feel a true sine wave source of power is better for computers but I have run my laptop computer for years with the Trace 1500 watt and have had no problem with the computer.

THE TOOL:

The Trace 1500-watt inverter is more than just a power source. It can also charge a battery if needed and can be stacked with another inverter in series for a 240 volt power source by using a stacking cable.

It is a high efficiency, high surge capacity, low idle current tool that is compatible with many types of batteries. I use a deep cycle marine battery just for the fact that I am constantly recharging the battery as I travel down the road. I have hooked the deep cycle battery to a one-way solenoid off of my alternator so the charge cannot come back from the inverters battery to the vehicles battery and cause me problems.

Built in to the inverter are LED status indicators that show charge mode, high or low battery voltage and over temperature or over load.

It is recommended that you install the inverter within ten feet of the battery or use a very heavy DC cable to cut down on the loss of power from the battery to the inverter.

Additionally, it is should be noted that the unit needs access to air to operate correctly and keep cool as it uses a three speed fan to maintain an acceptable temperature. Do not install the inverter in an airtight location and do not install it in a gasoline storage area. Installation in a diesel storage area is acceptable but I would not do it myself.

IN SUMMARY:

DESCRIPTION: A 1500-watt continuous power source that converts 12 or 24 volt DC power to 120 volts AC.

PRICE: Around \$1000 dollars.

COMMENTS: A solid investment for any mobile operation.

TEST DRIVE RESULTS: A quality product worth a long look from anyone needing AC power on a job site.

The tool is an on demand unit that is ready at the time of need. A slight, about 1/2 second delay does exits before power is available to run your tools but you will quickly adjust to the delay and it will not be a problem. It is also a very quiet operating unit as opposed to the much noisier gas powered units one must start before power is available.

CONCLUSIONS:

I have, during the past 20 years of doing mobile locksmith work, found the Trace 1500-watt inverter model DR1512 to be a superior workhorse that has not given me a minute's trouble.

The two AC plug INS are a real plus as I run a strip in the front and another in the back of my vehicle for ease of access. The connection to the DC source is solid and withstands the constant bouncing of driving over gravel roads.

I would recommend that anyone looking for a 120 volt AC power source give the Trace 1500 watt, Model DR1512 a long look. It has served me well for years and I would be in the market for another should the need arise.

For more information contact:

Xantrex Technologies, Inc

5916 195th Street NE Arlington, WA 98222 360-435-8826 800-670-0707